

MnO₂ as Terminal Oxidant in Wacker Oxidation of Homoallyl Alcohols and Terminal Olefins

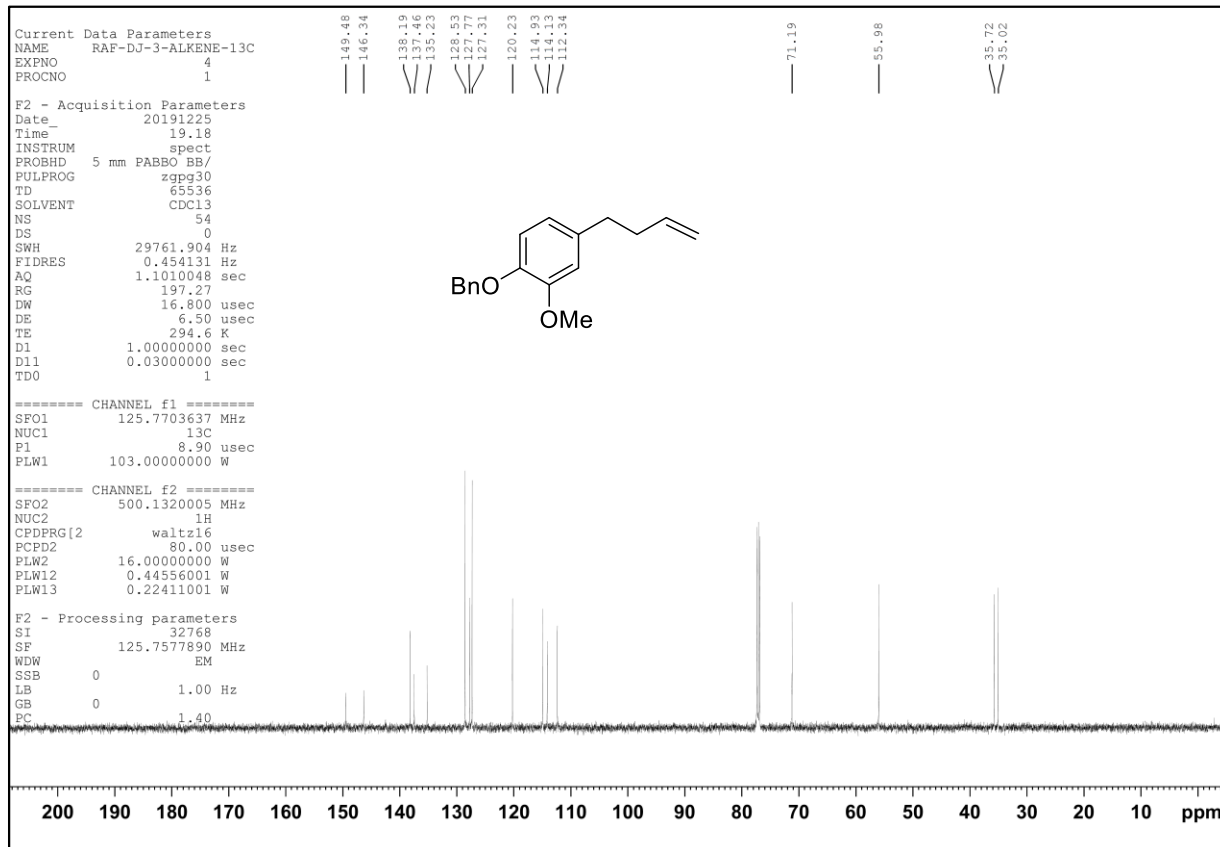
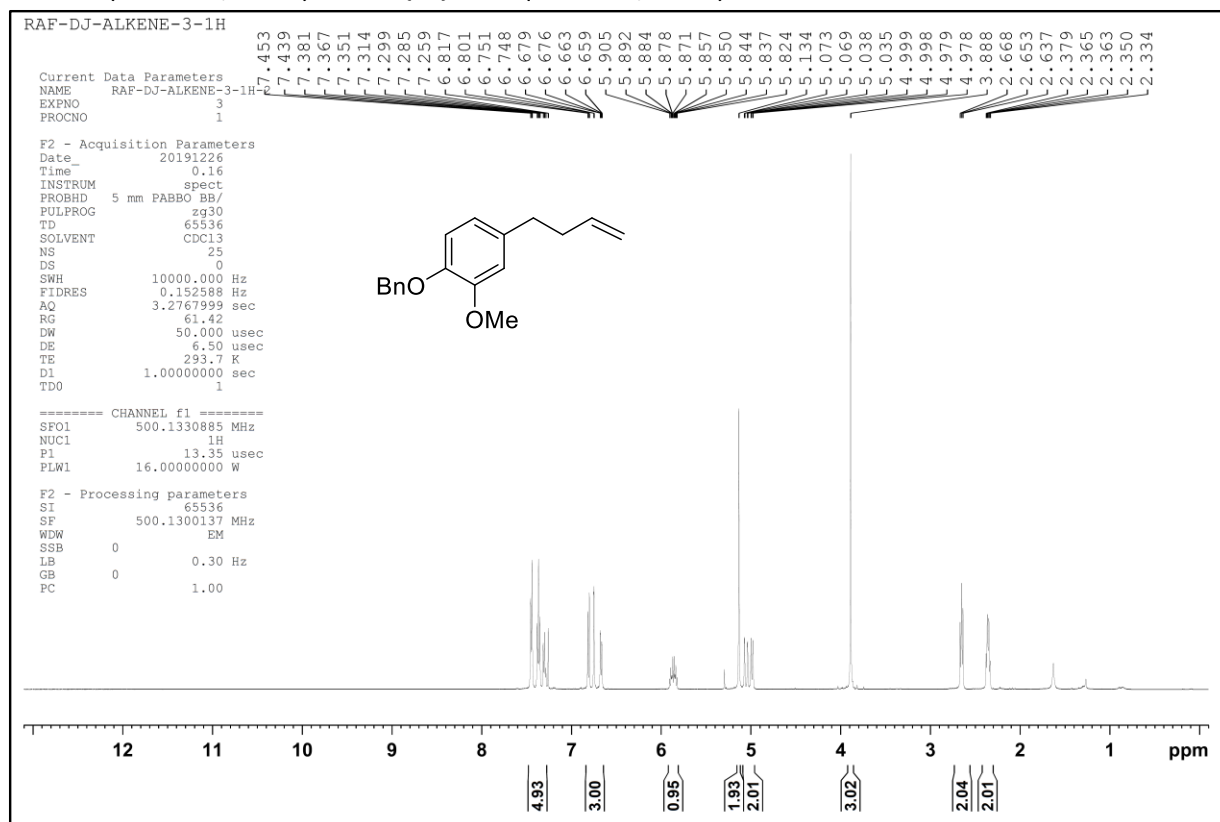
Rodney A. Fernandes,* Gujjula V. Ramakrishna and Venkati Bethi

Department of Chemistry, Indian Institute of Technology Bombay, Powai
Mumbai 400076, Maharashtra, India

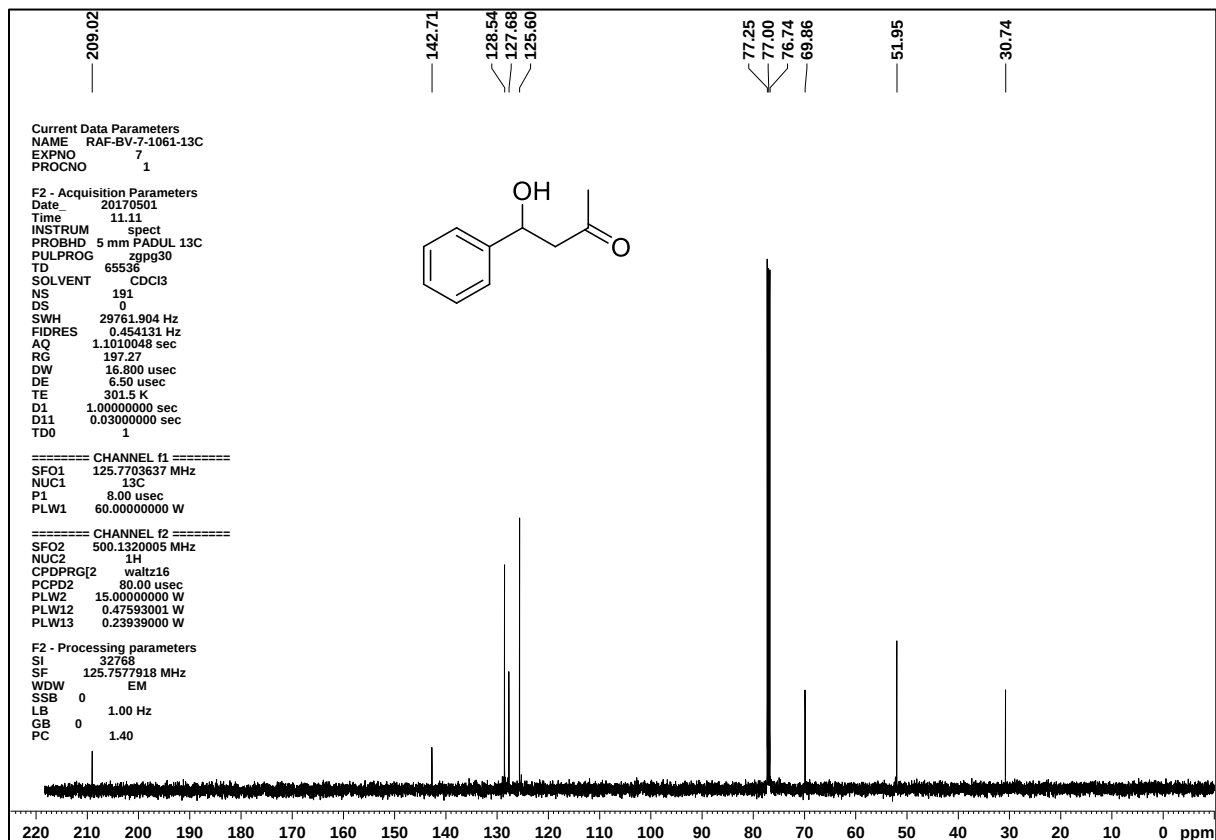
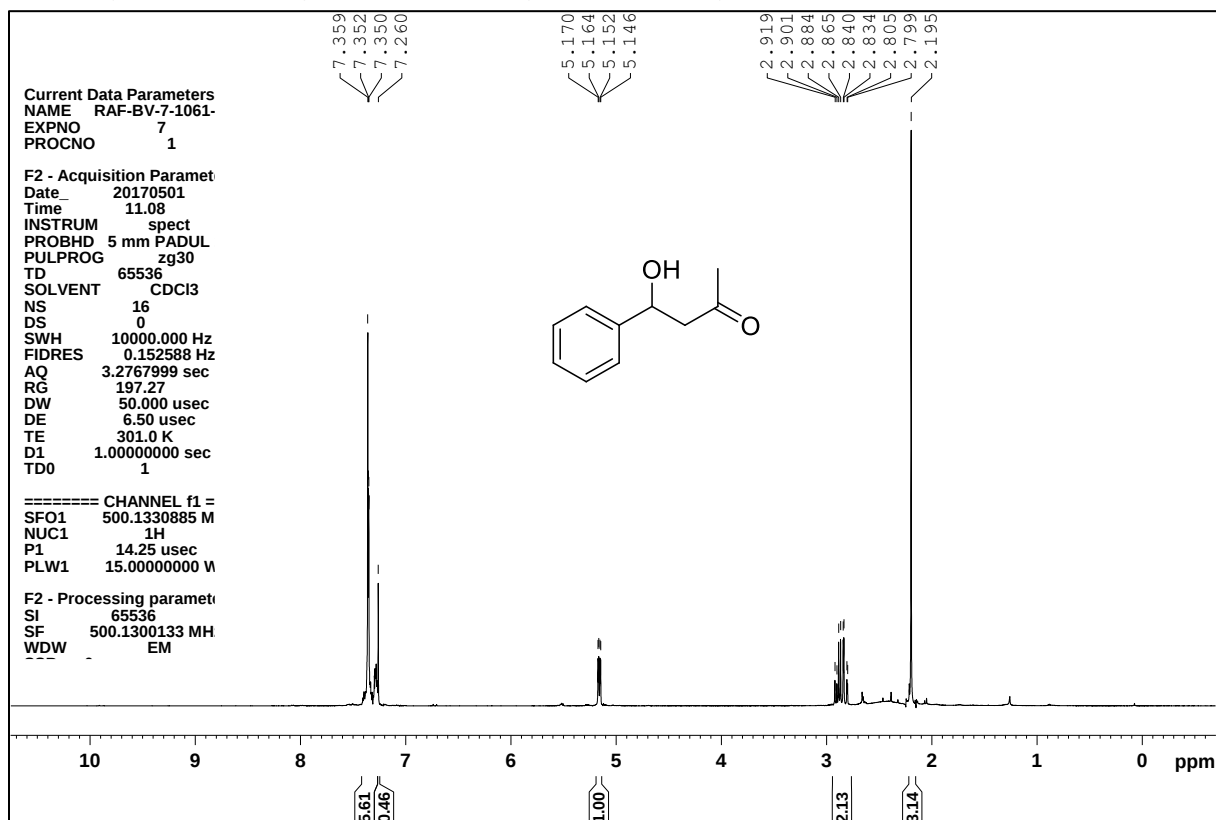
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¹ H and ¹³ C spectra of all compounds	S2–S52
For spectra of 3'a and 3'f see ref. 6b in manuscript	

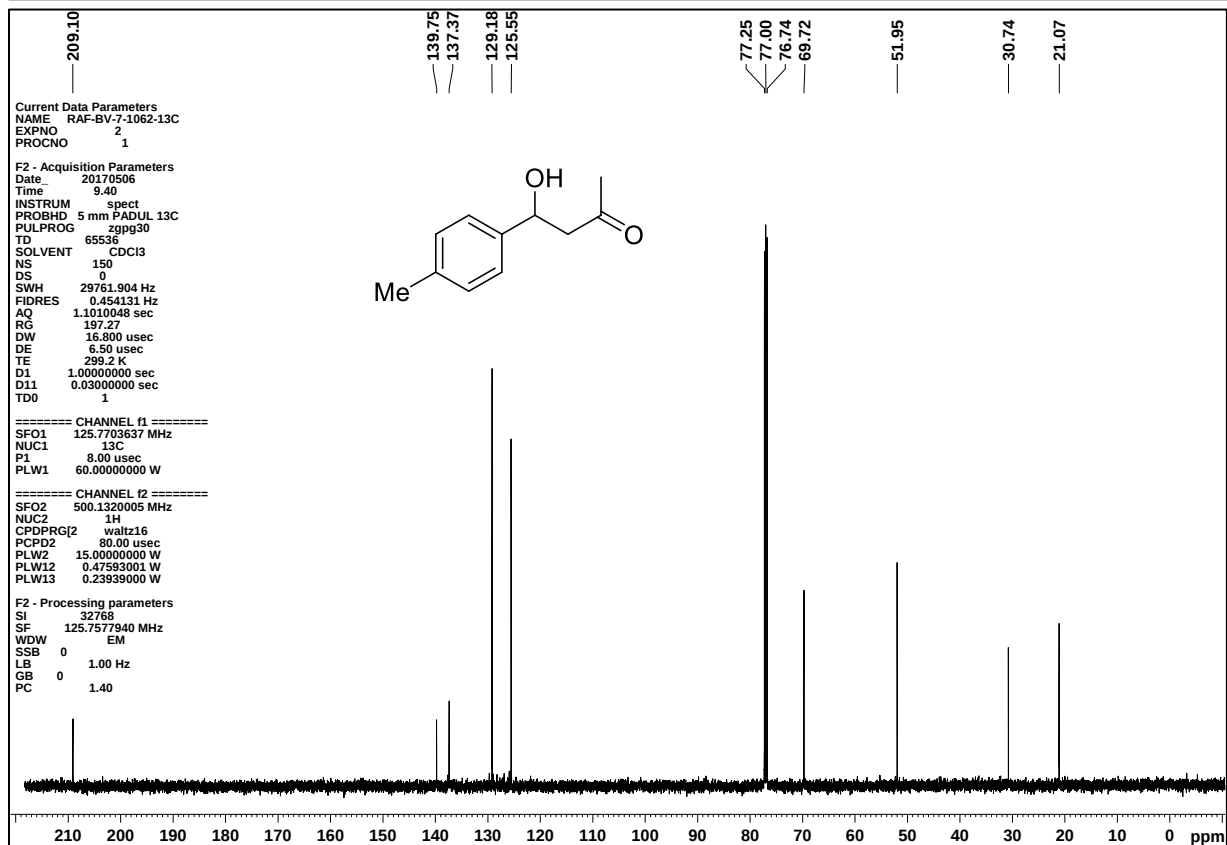
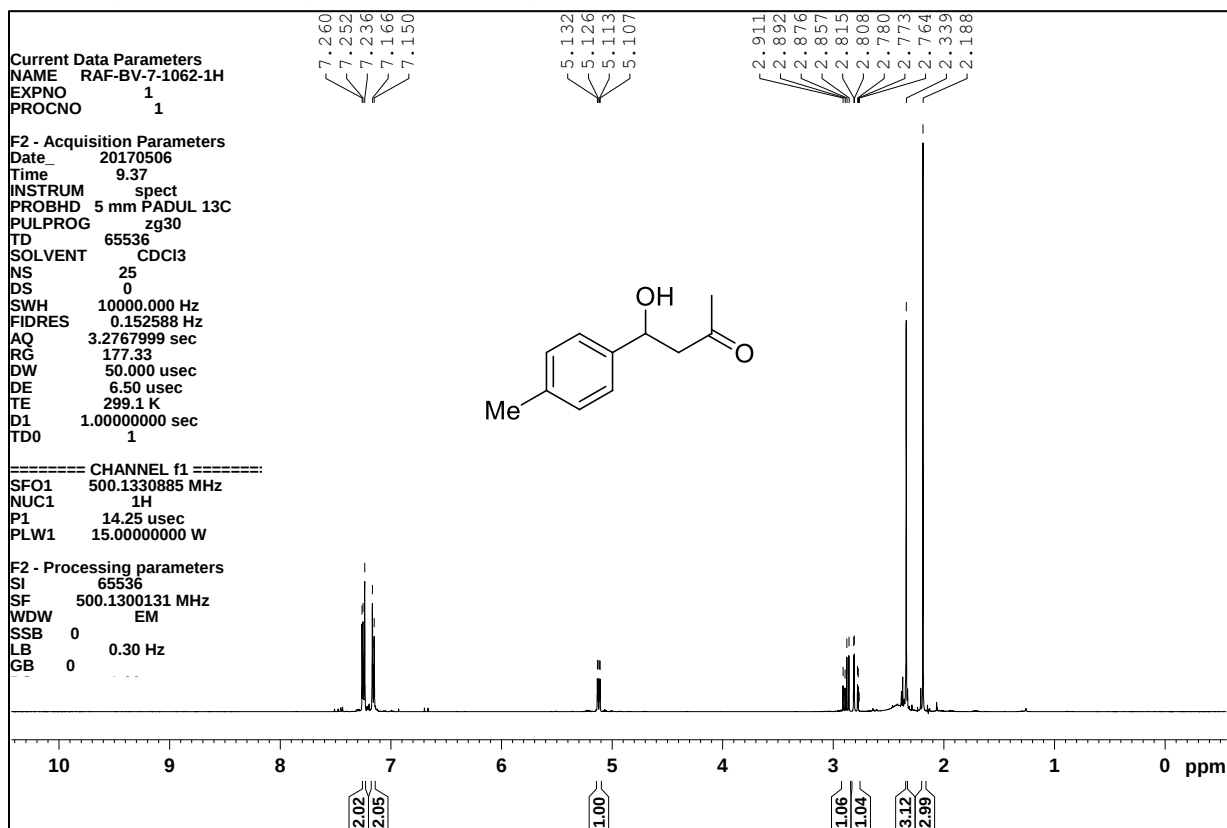
^1H NMR (500 MHz, CDCl_3) and $^{13}\text{C}\{^1\text{H}\}$ NMR (125 MHz, CDCl_3) of **1'o**



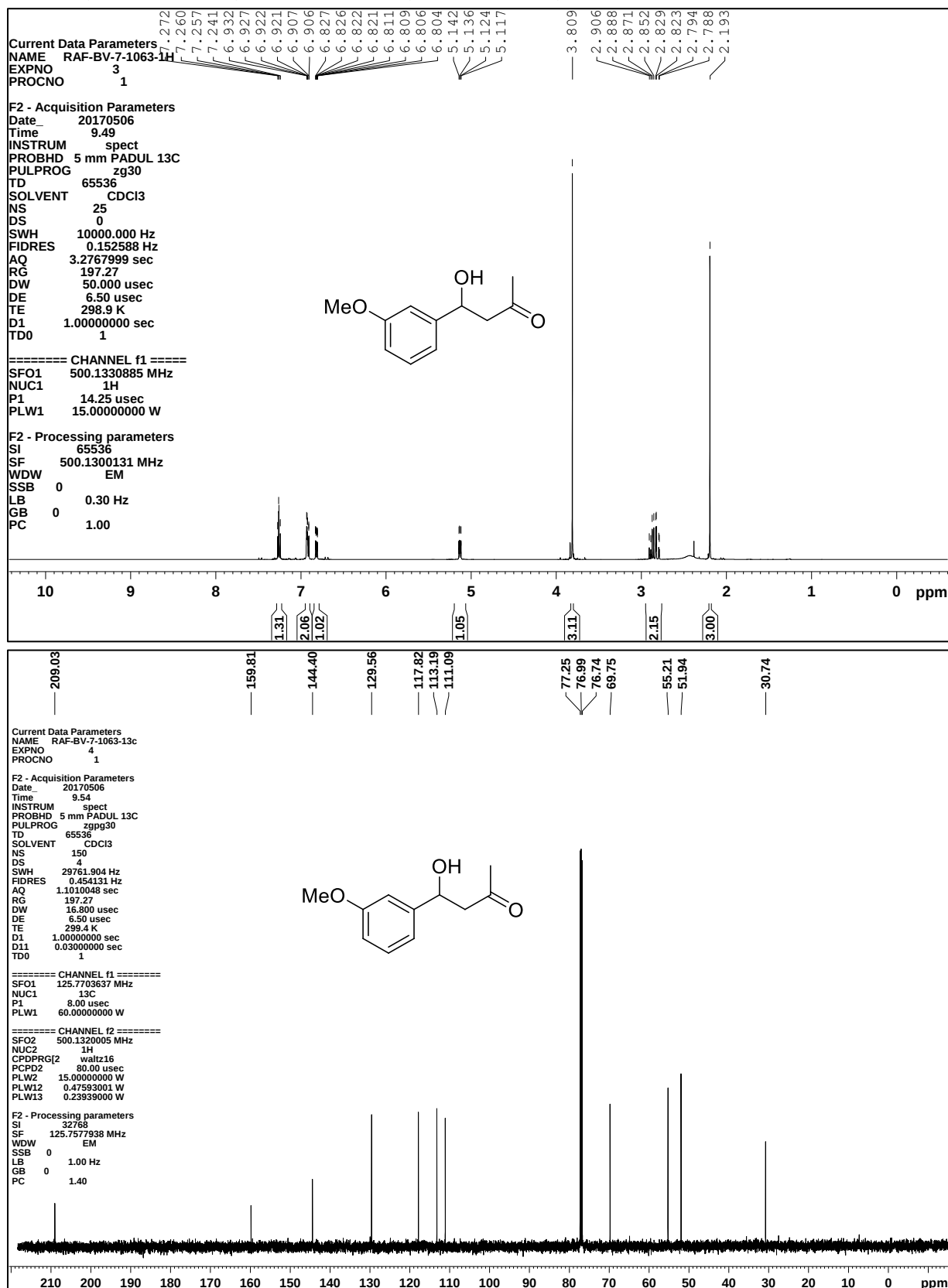
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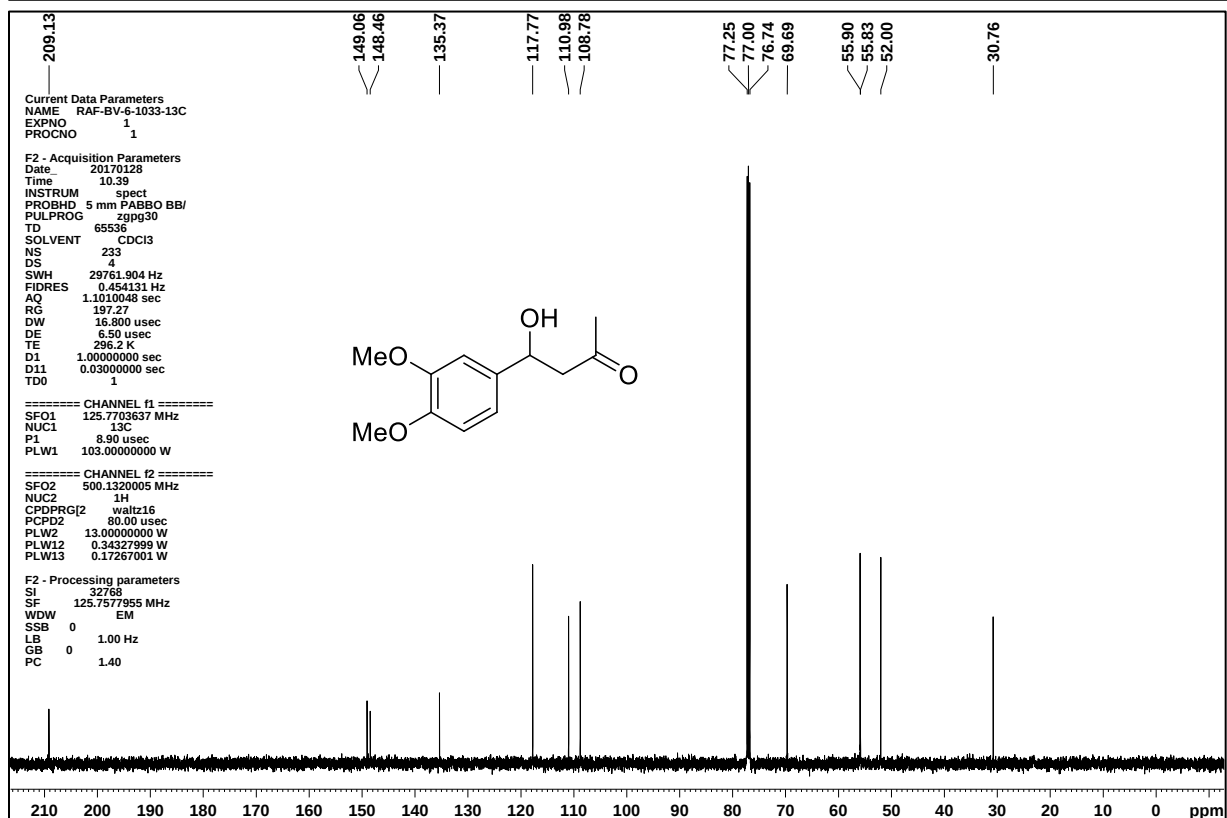
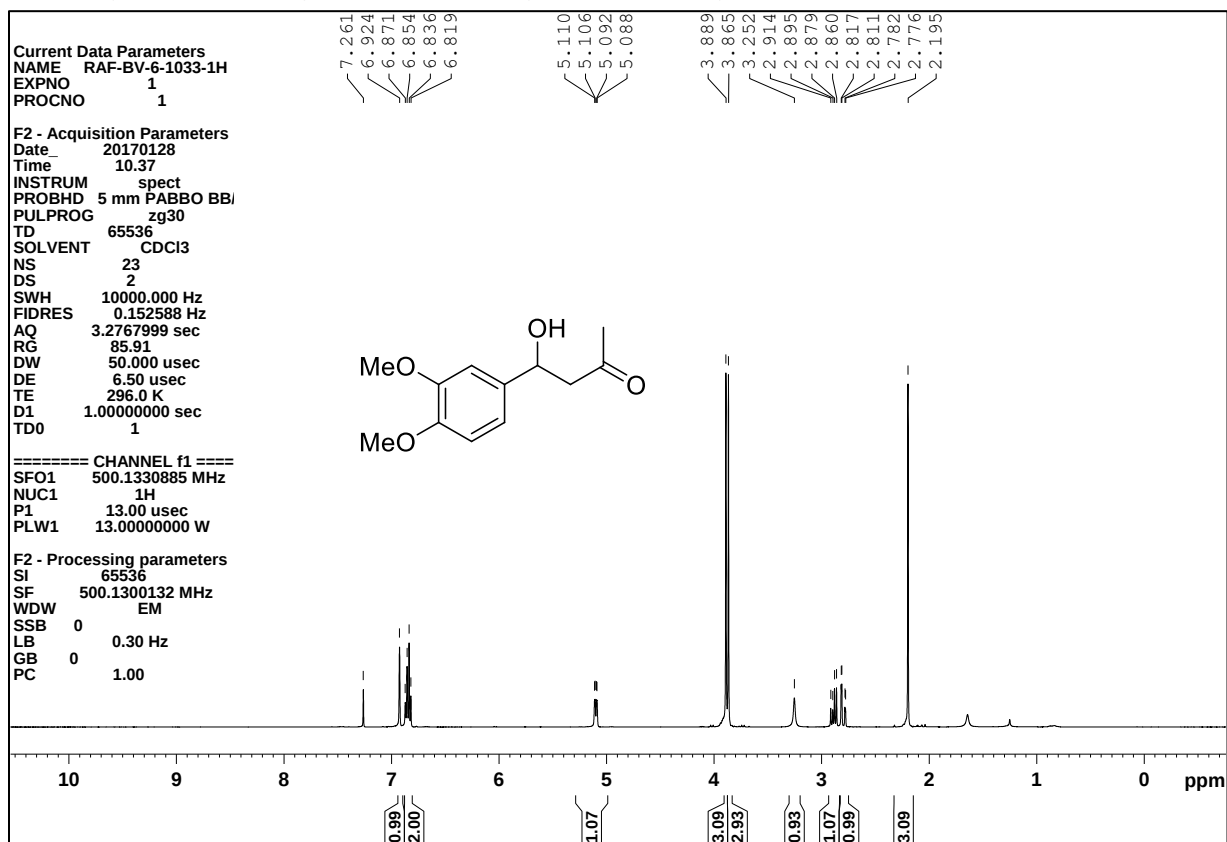
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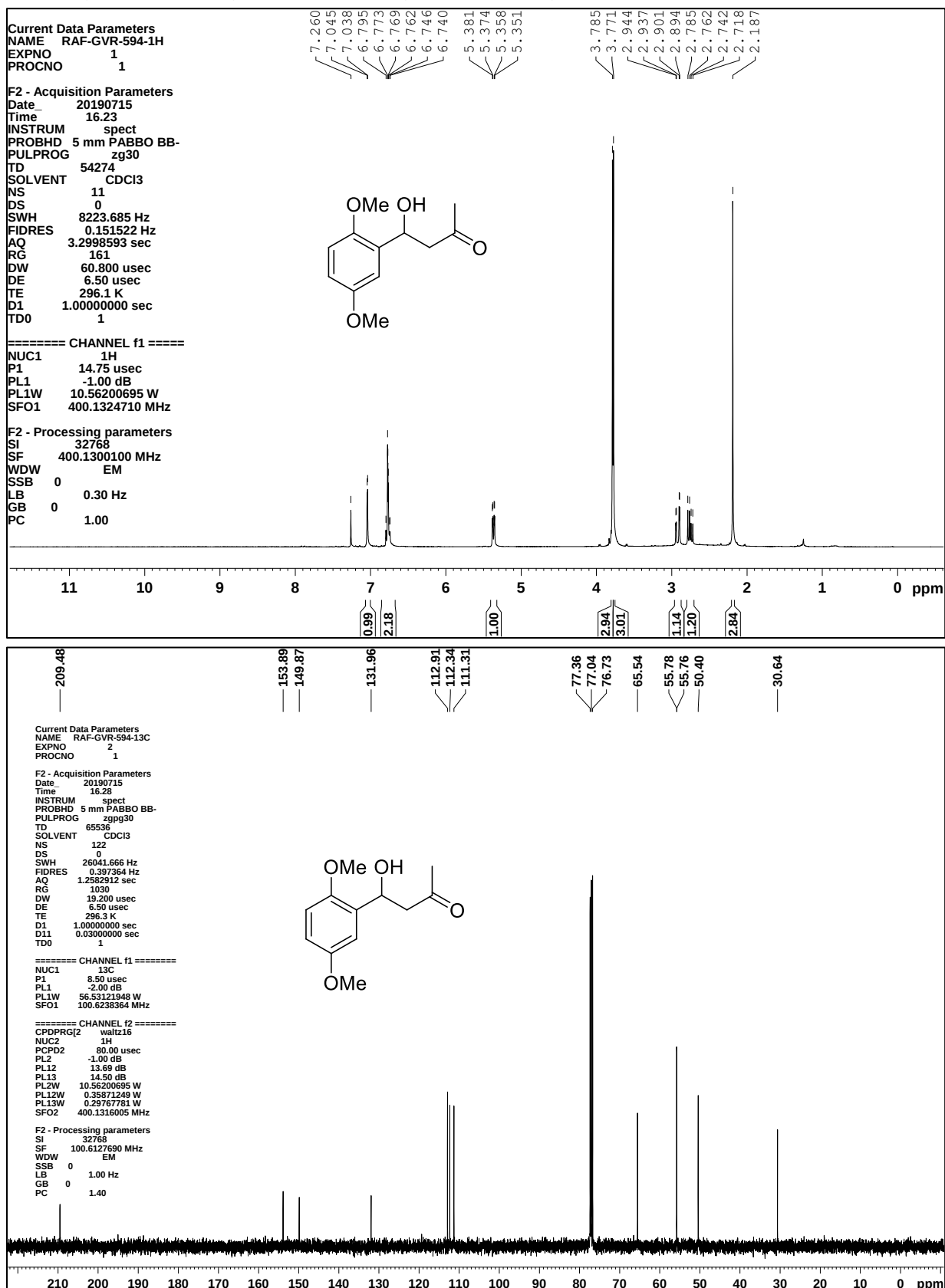
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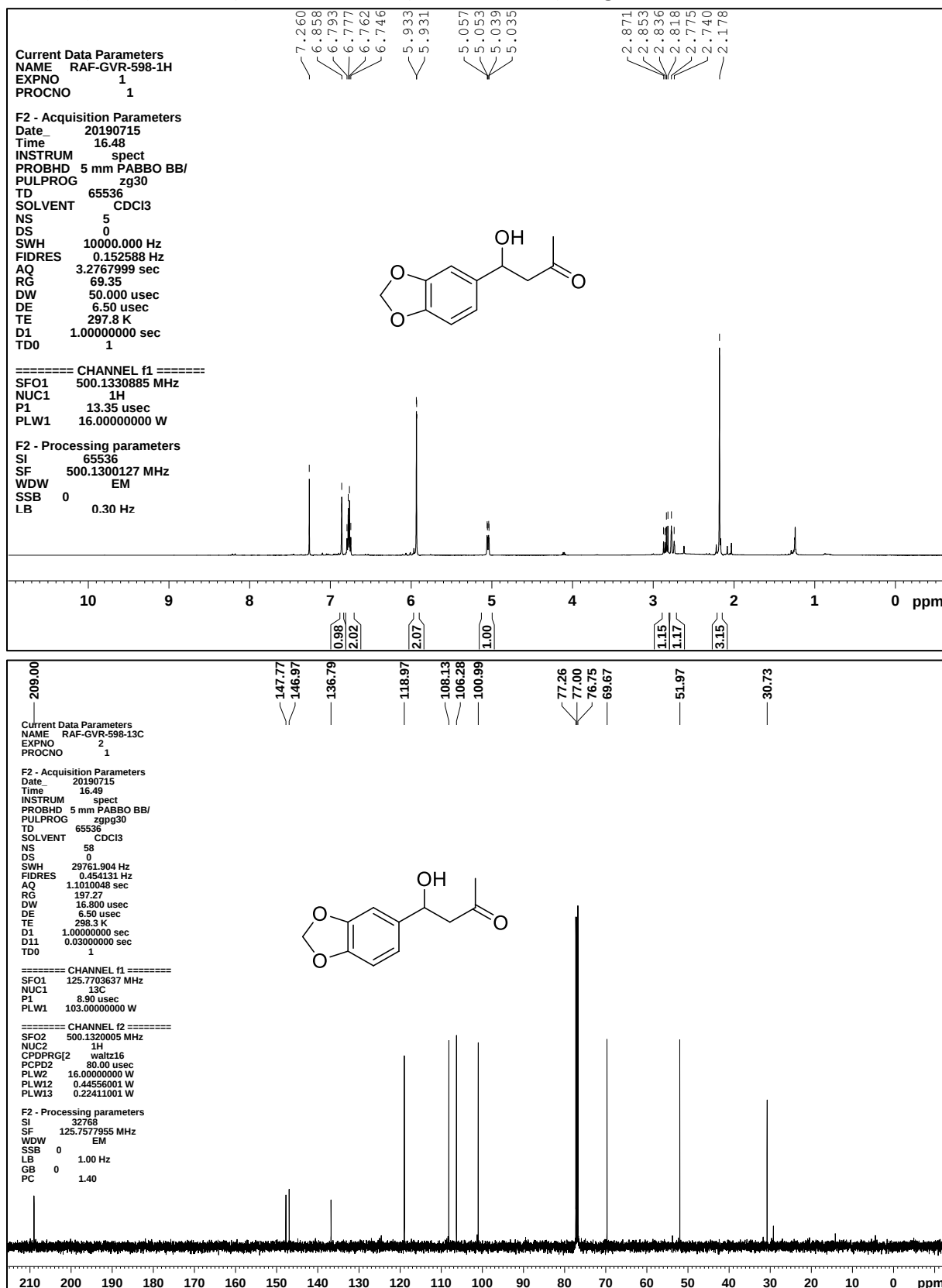
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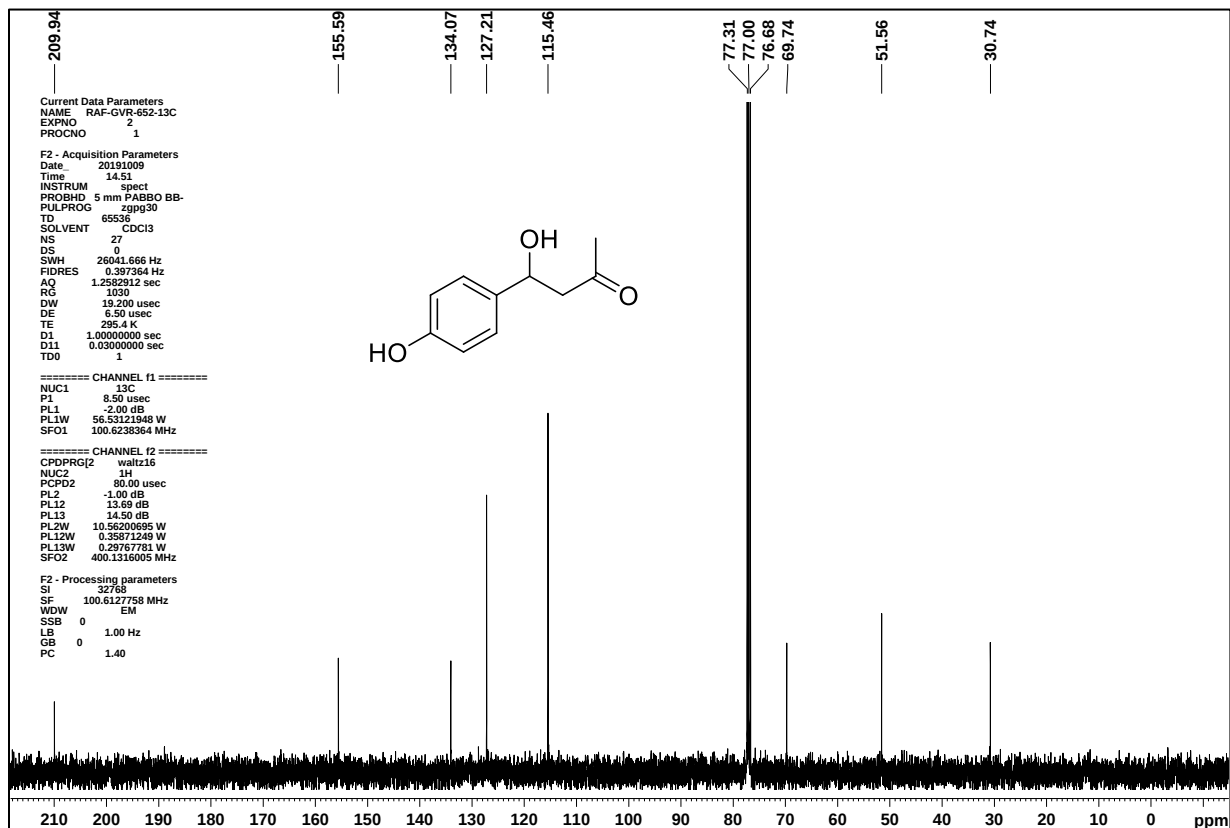
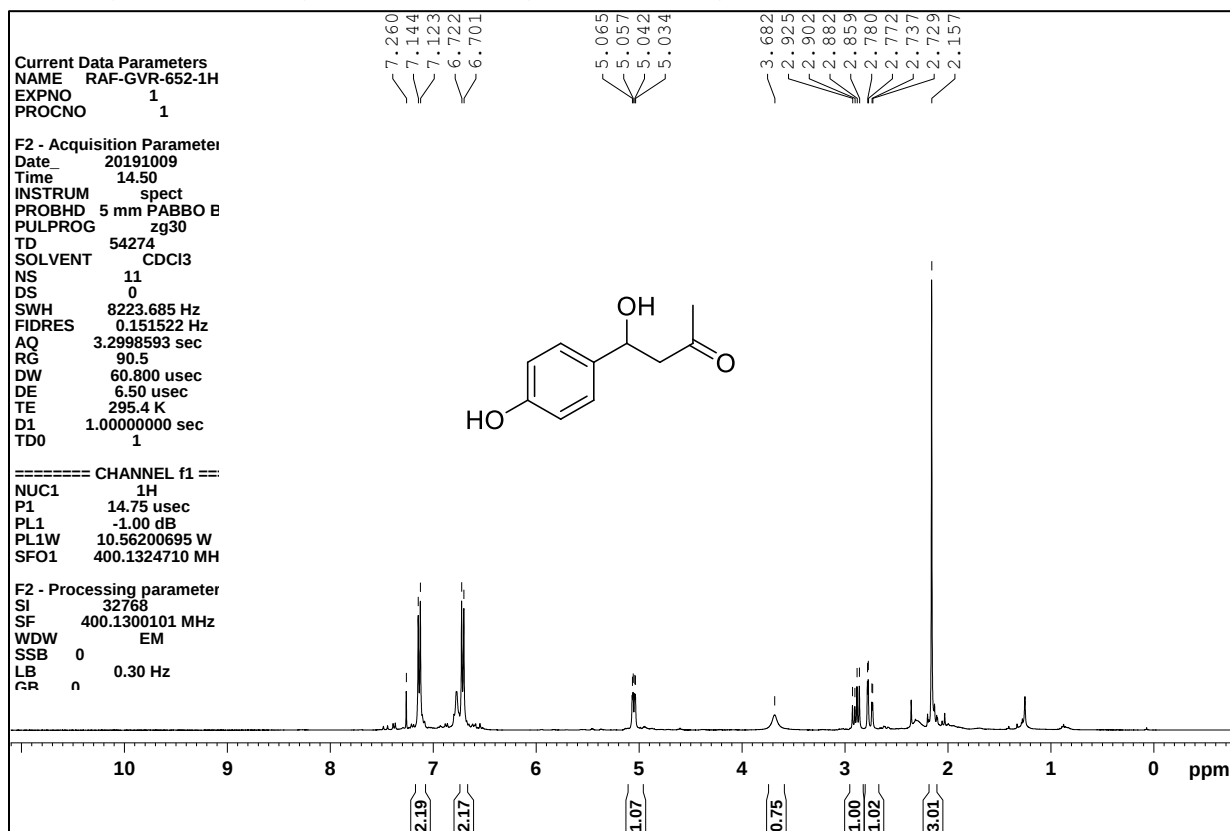
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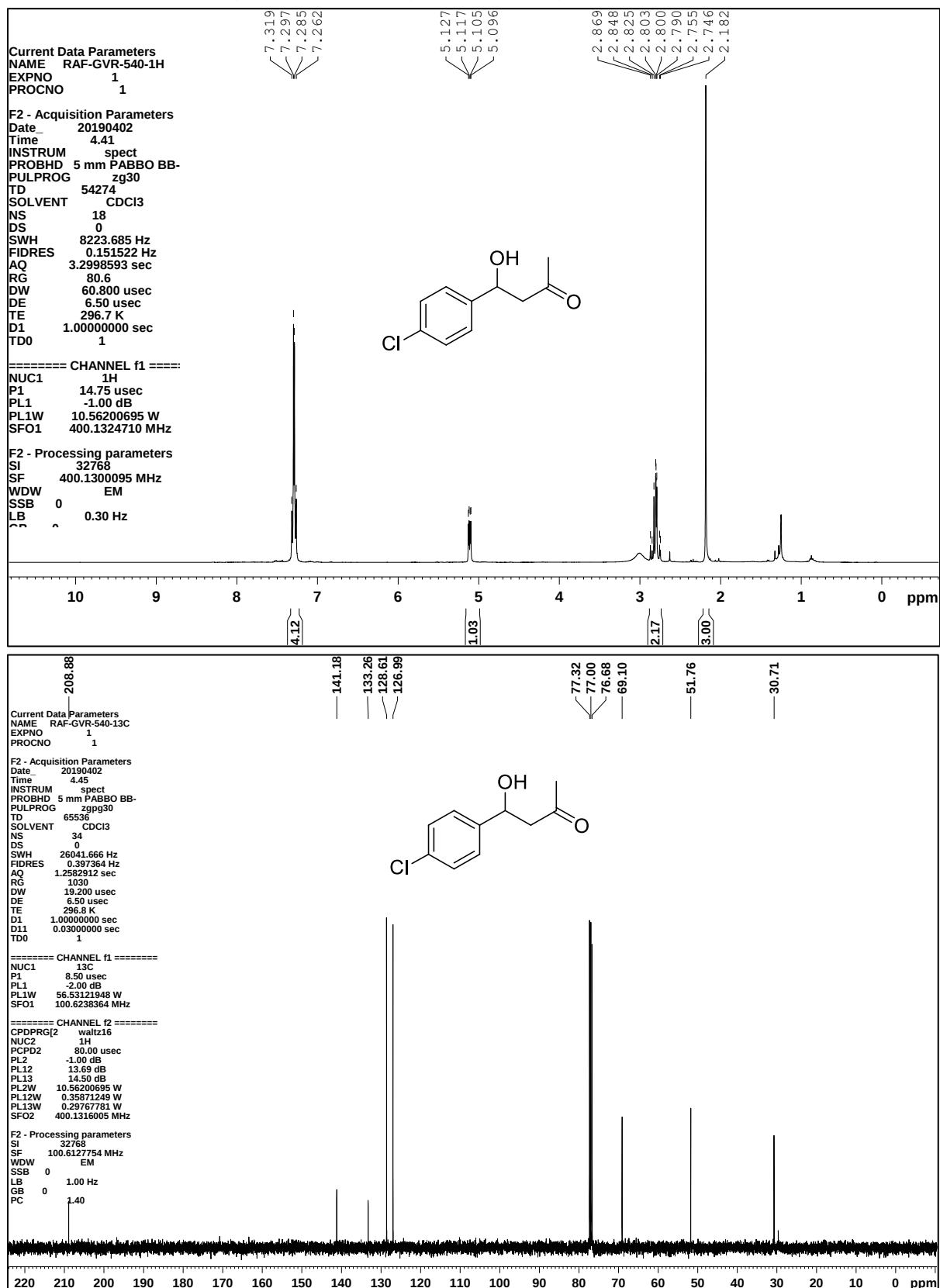
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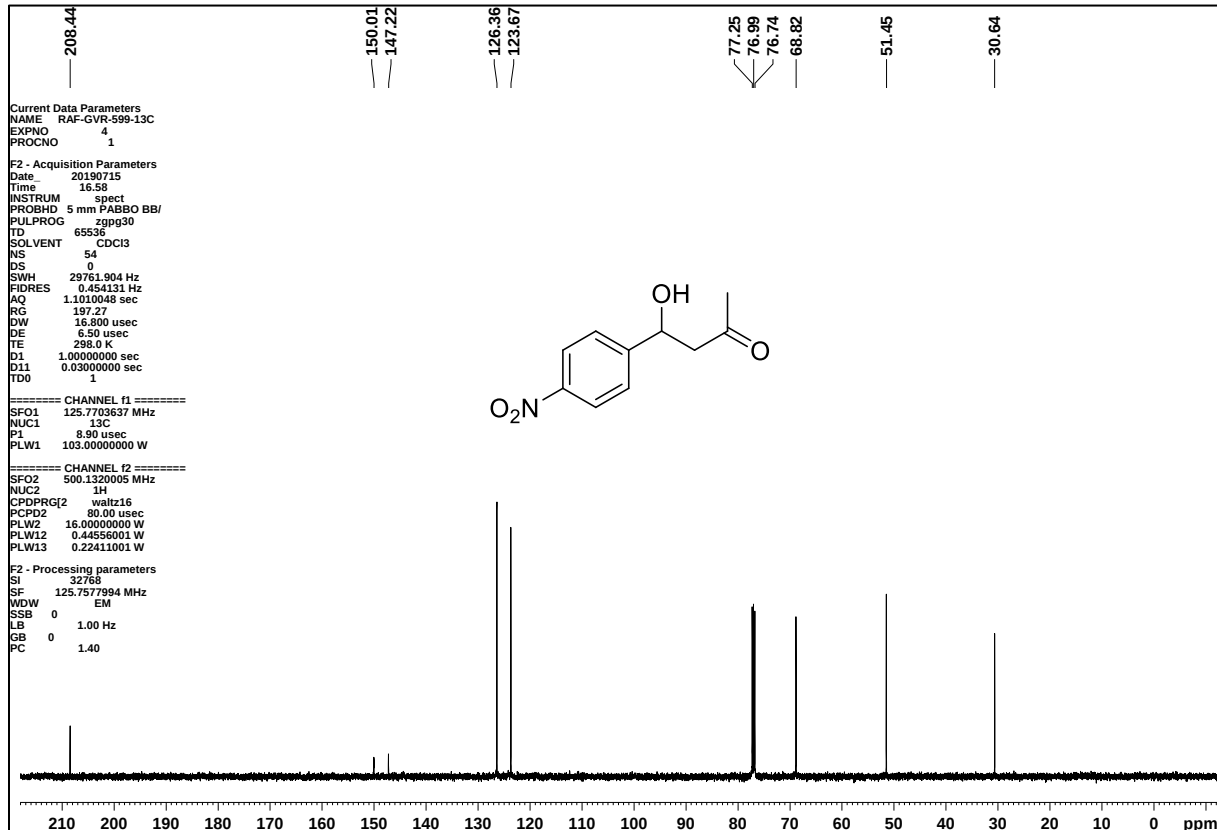
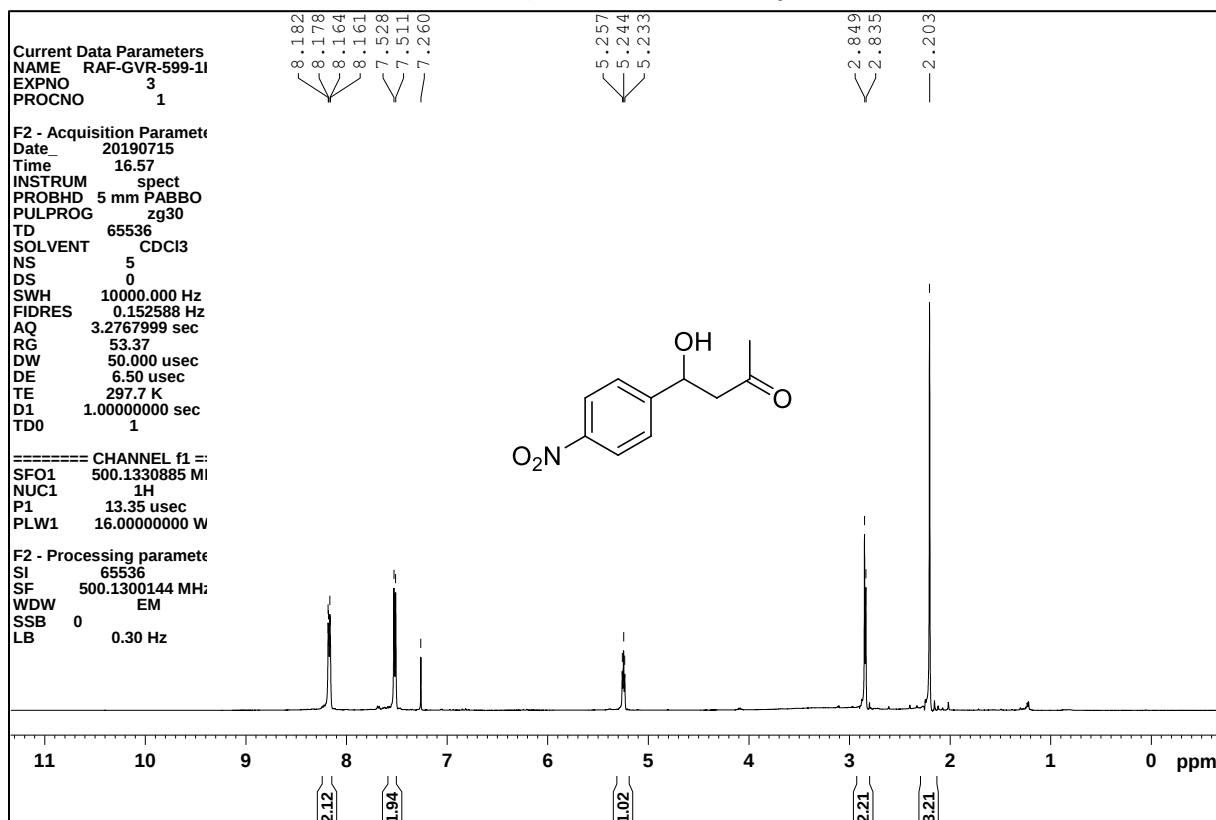
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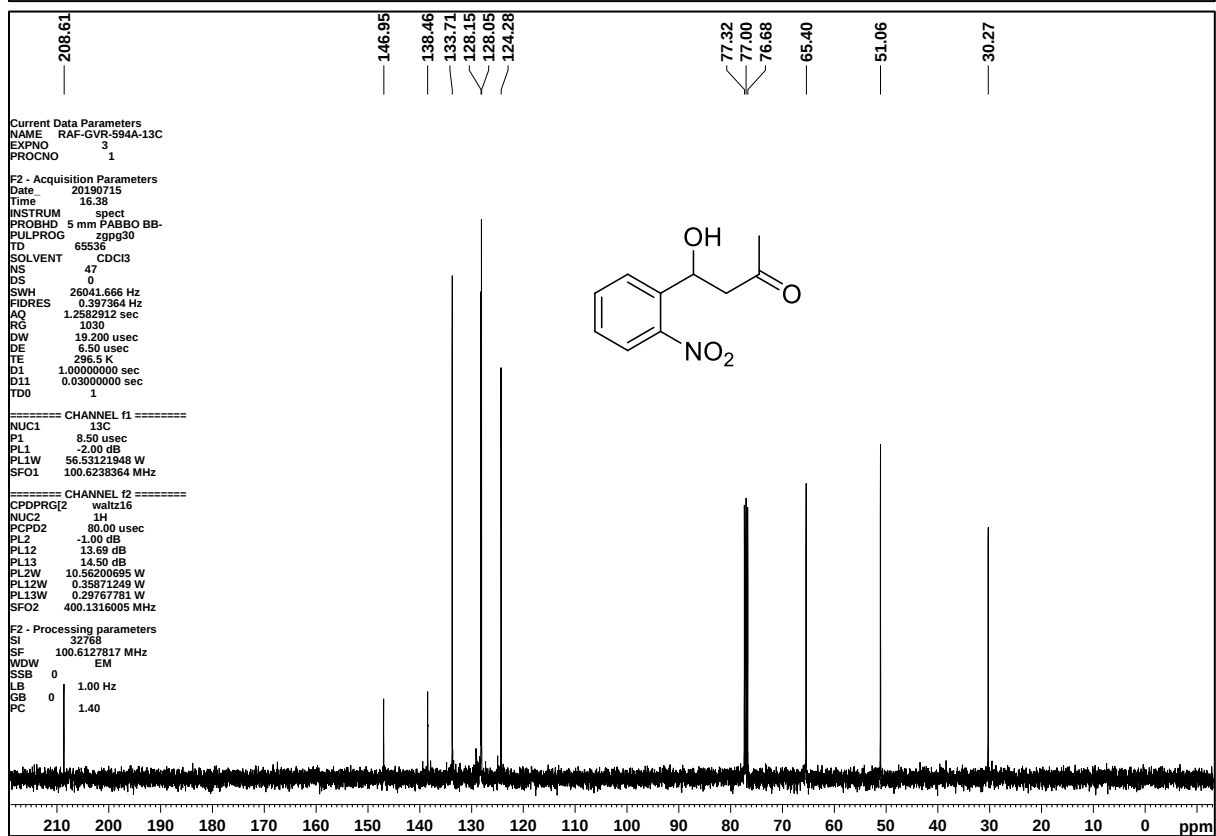
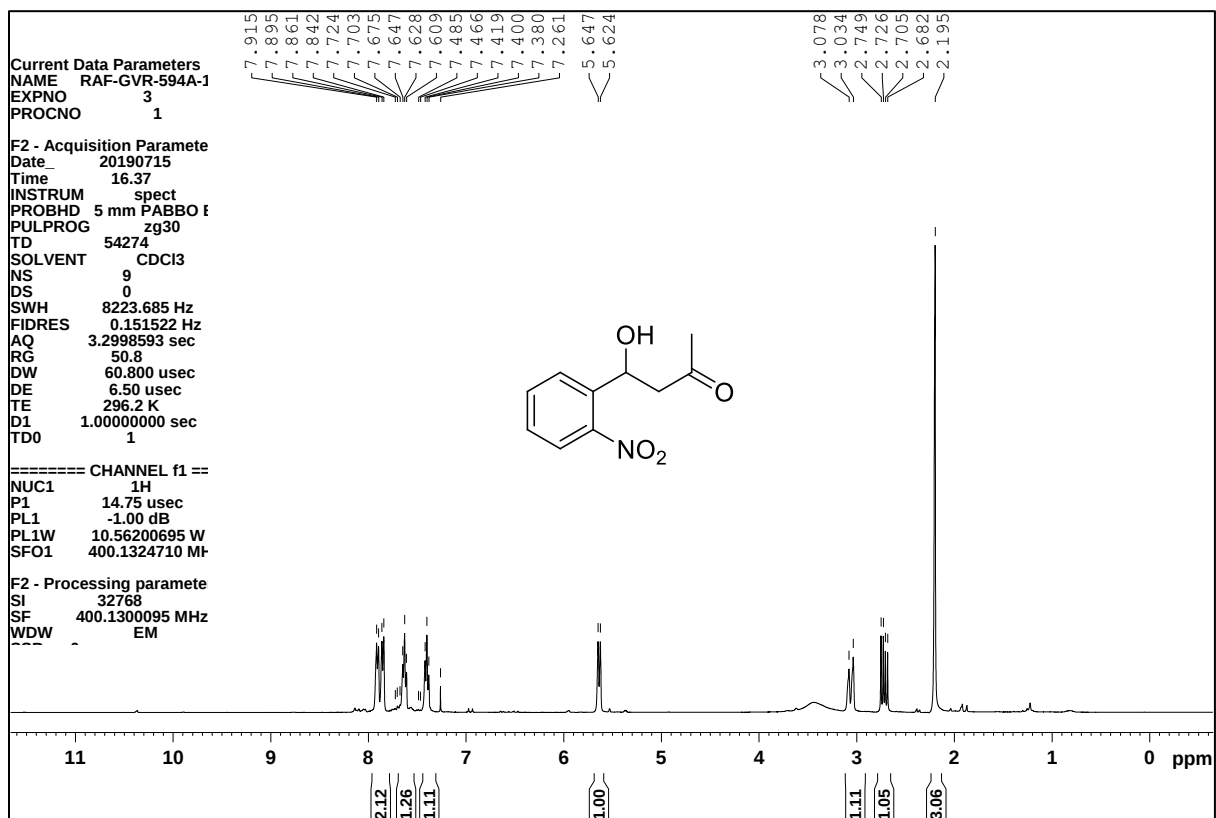
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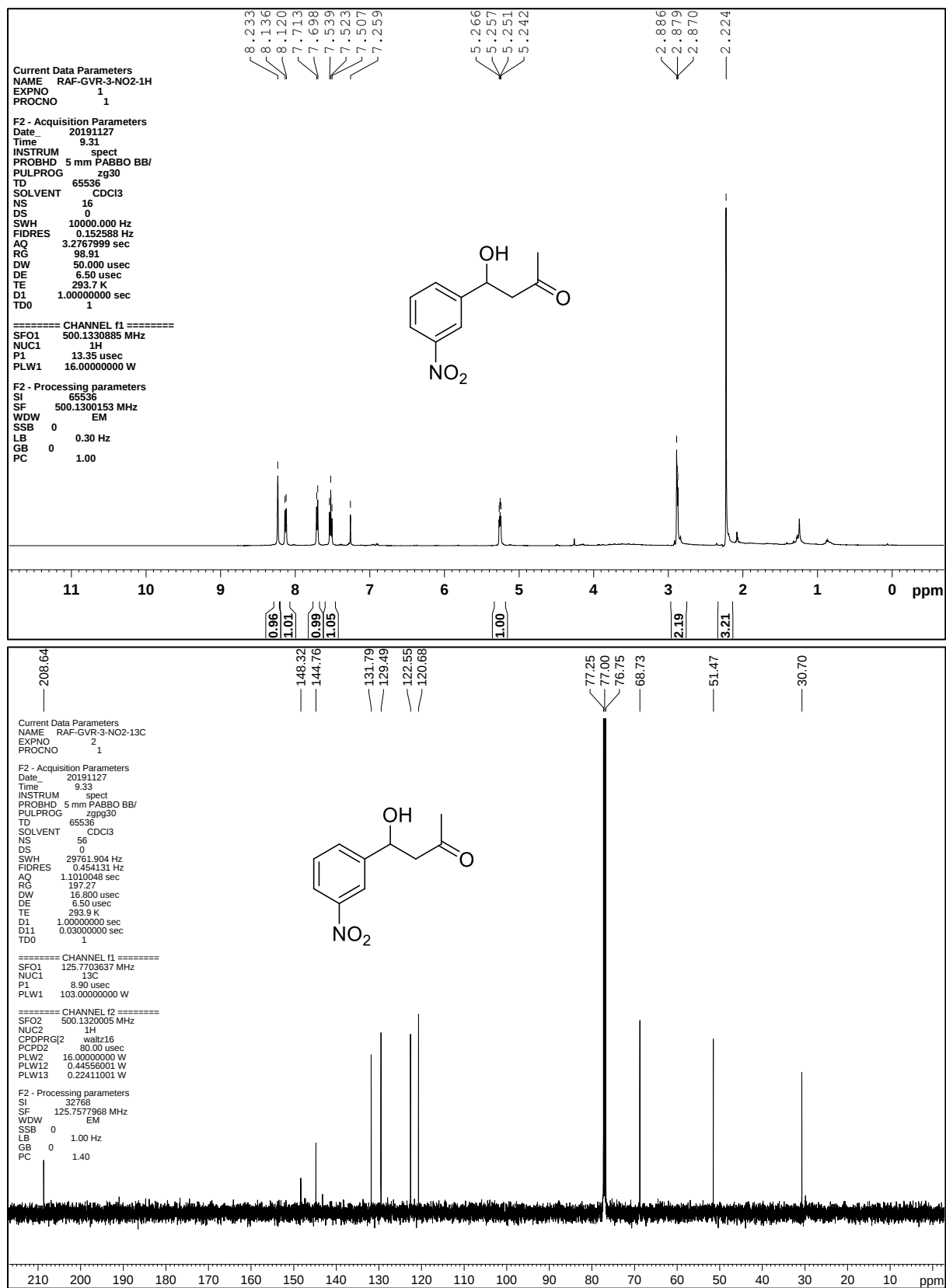
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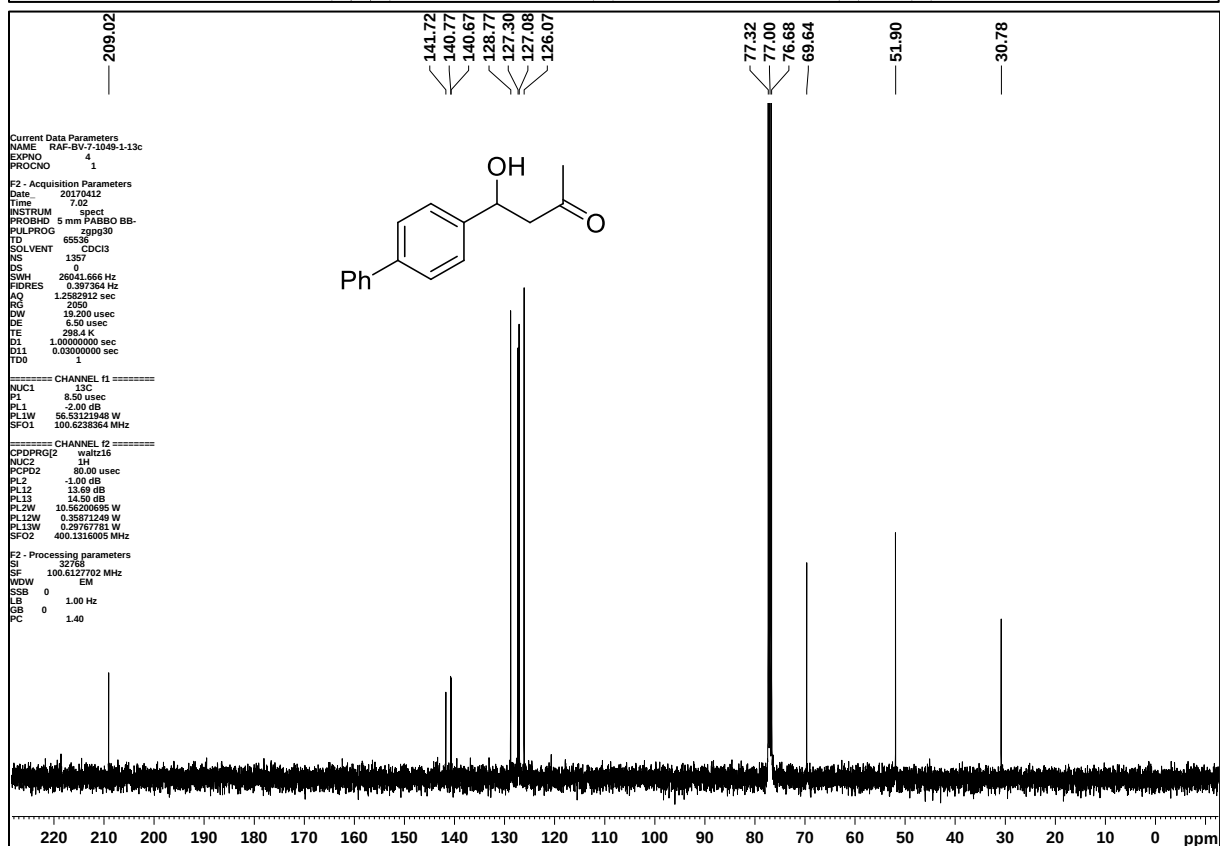
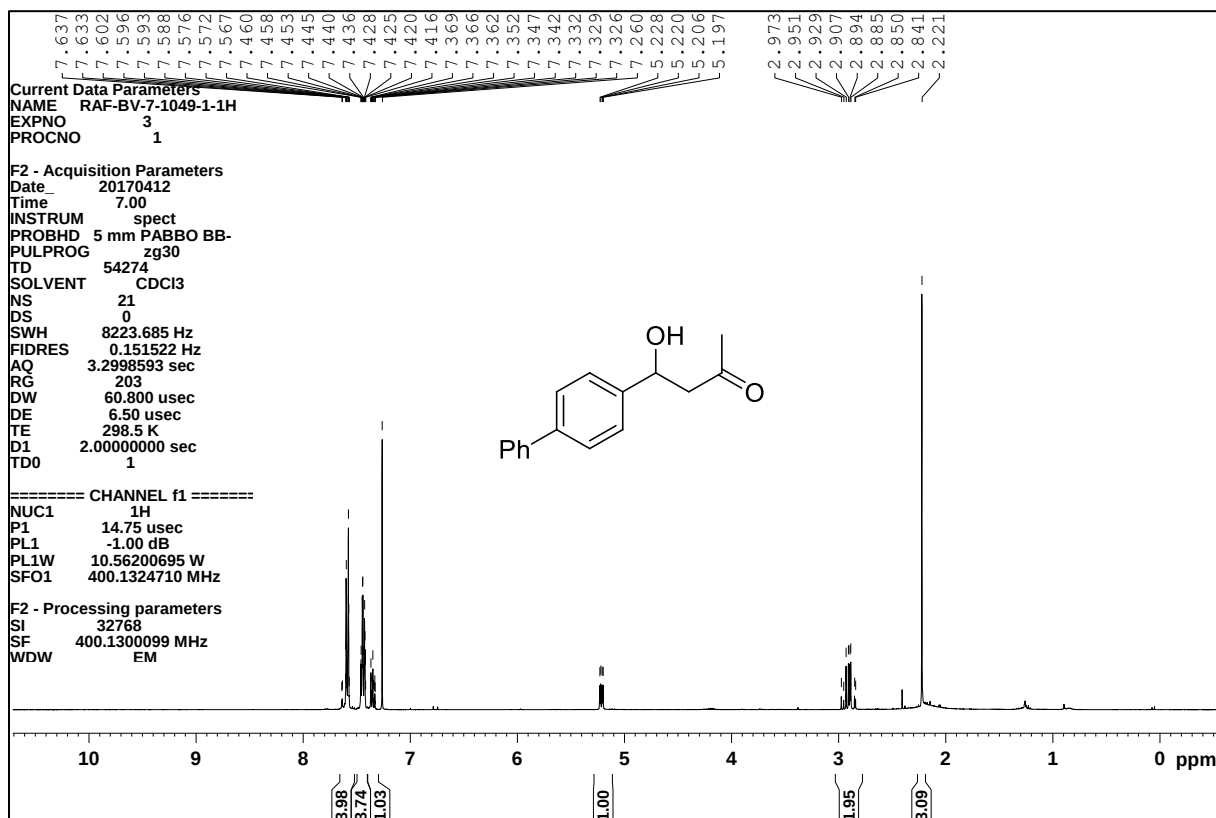
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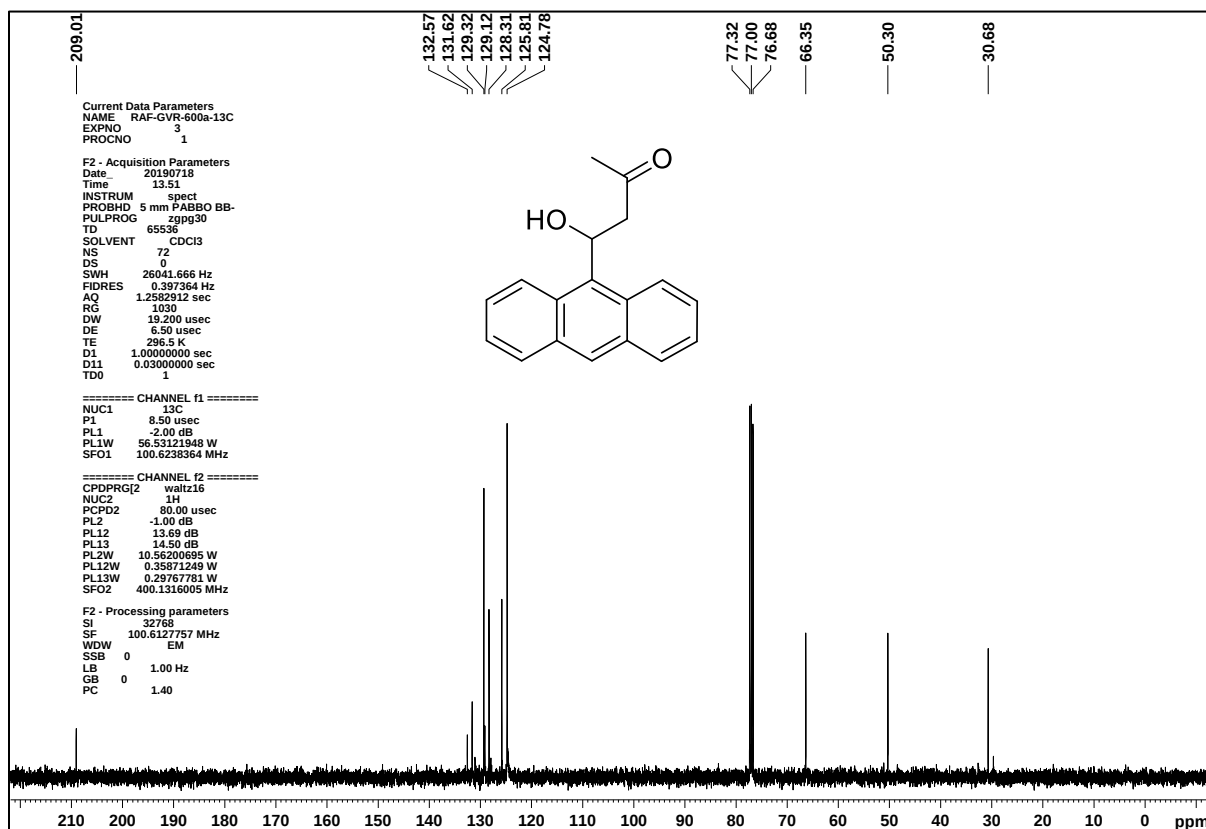
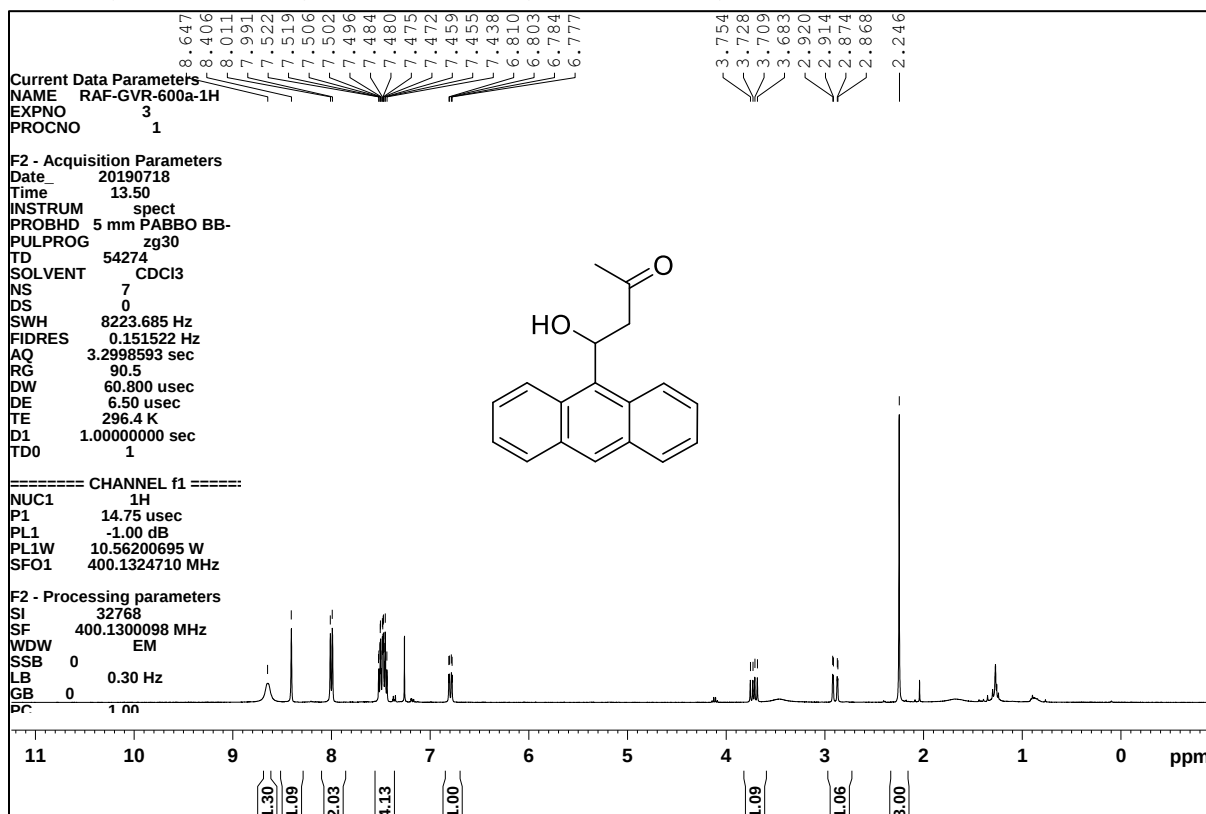
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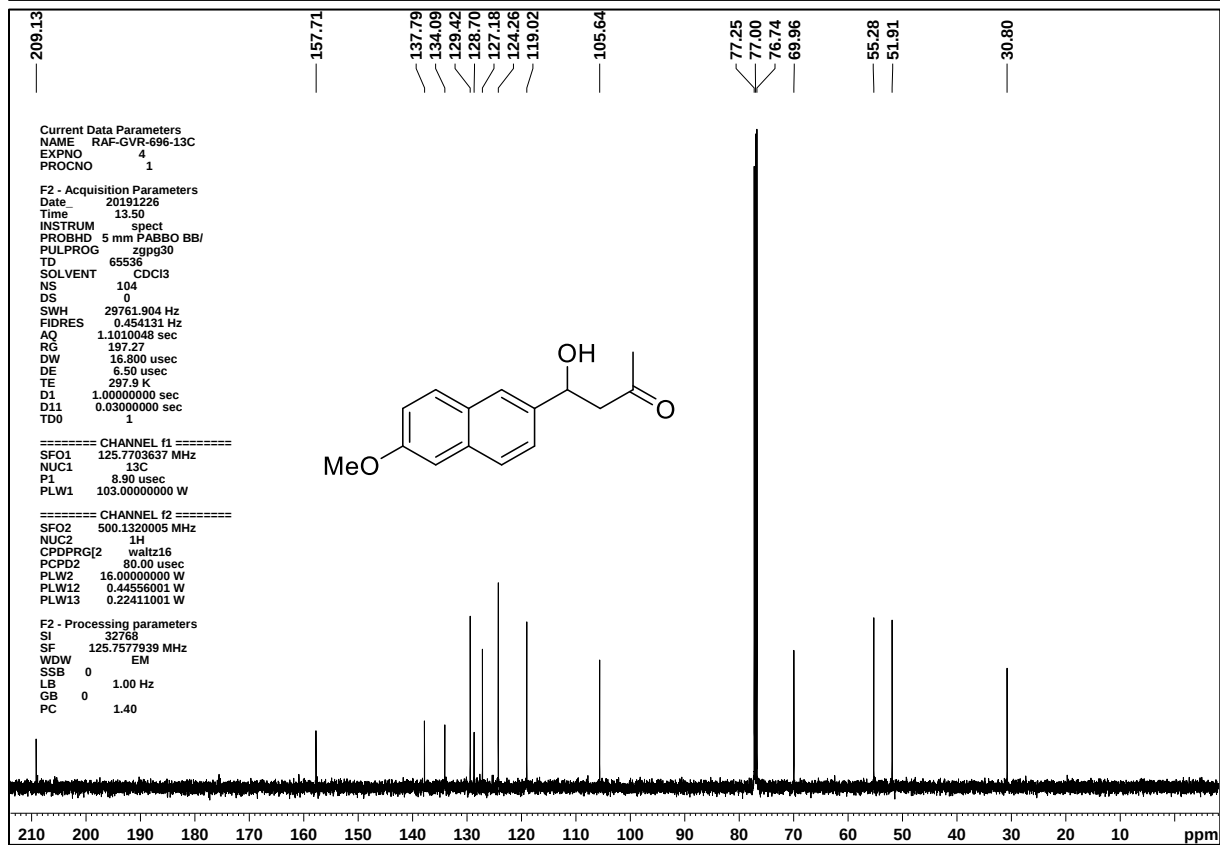
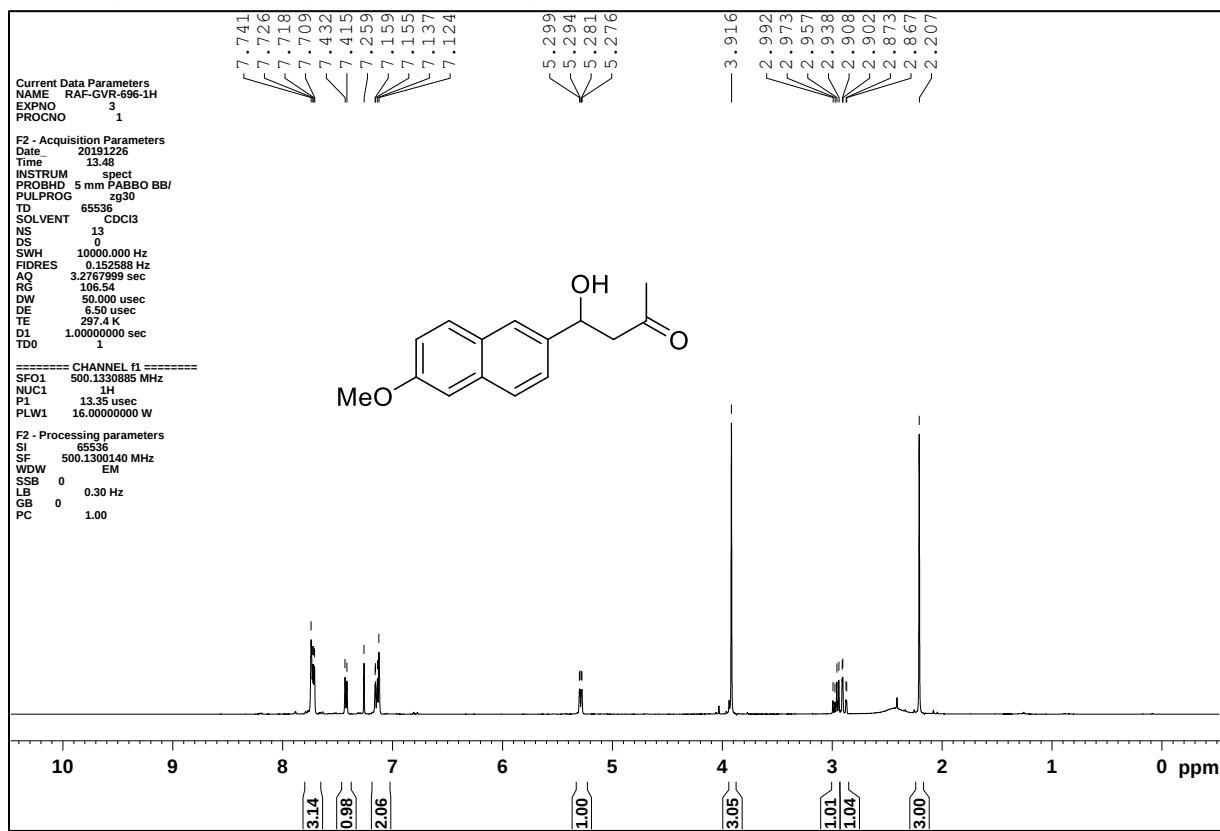
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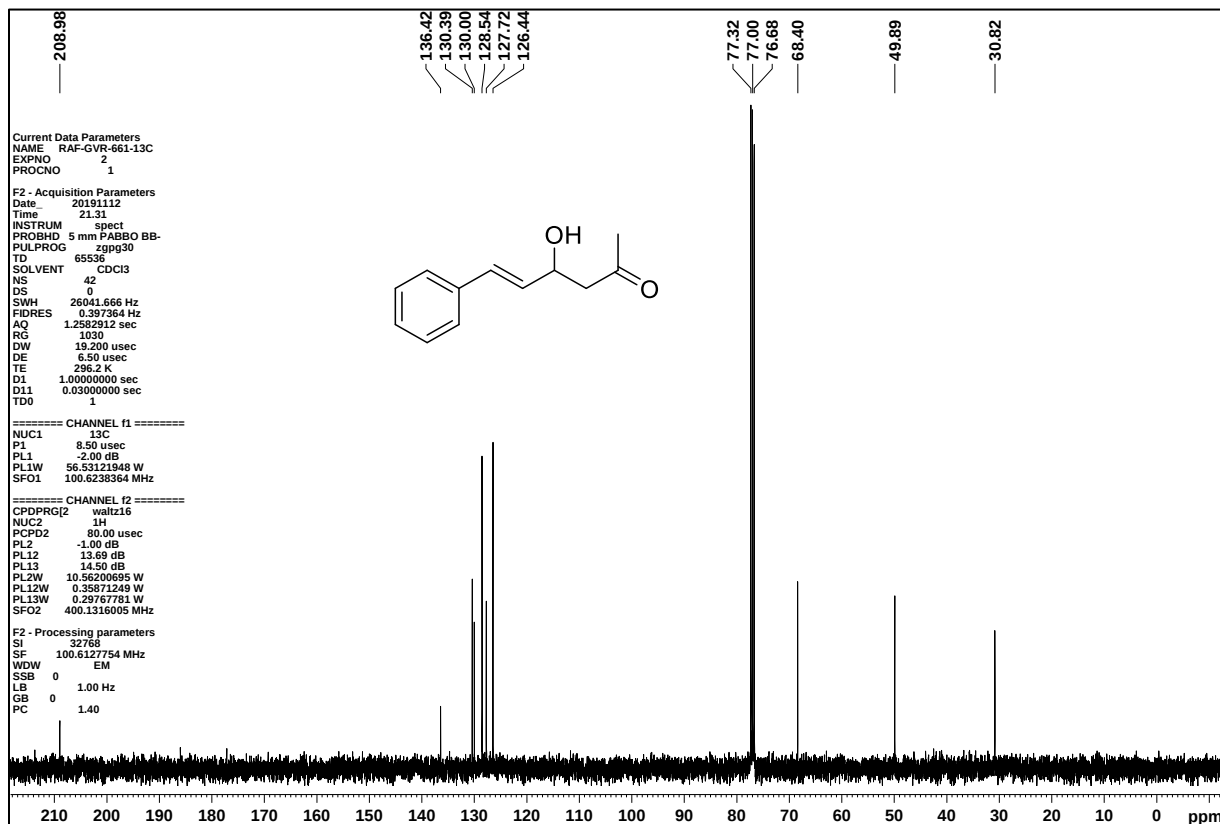
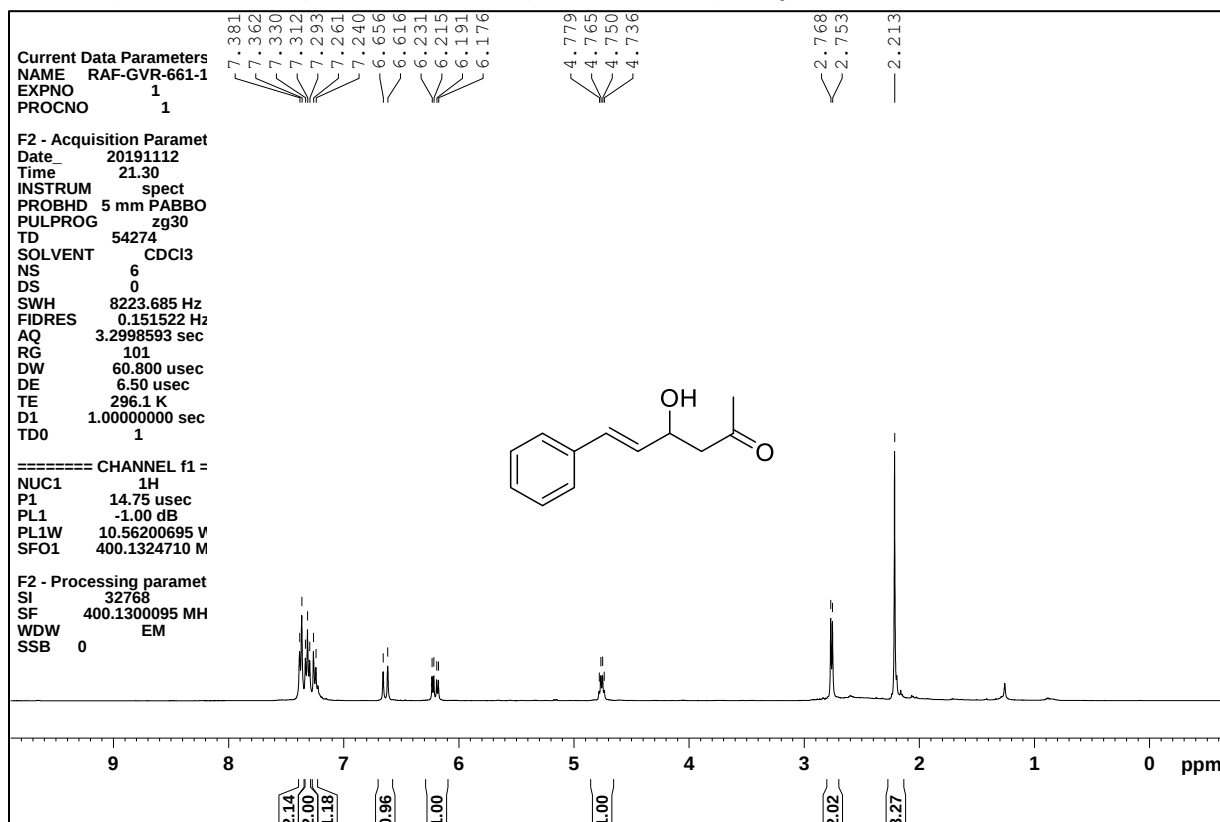
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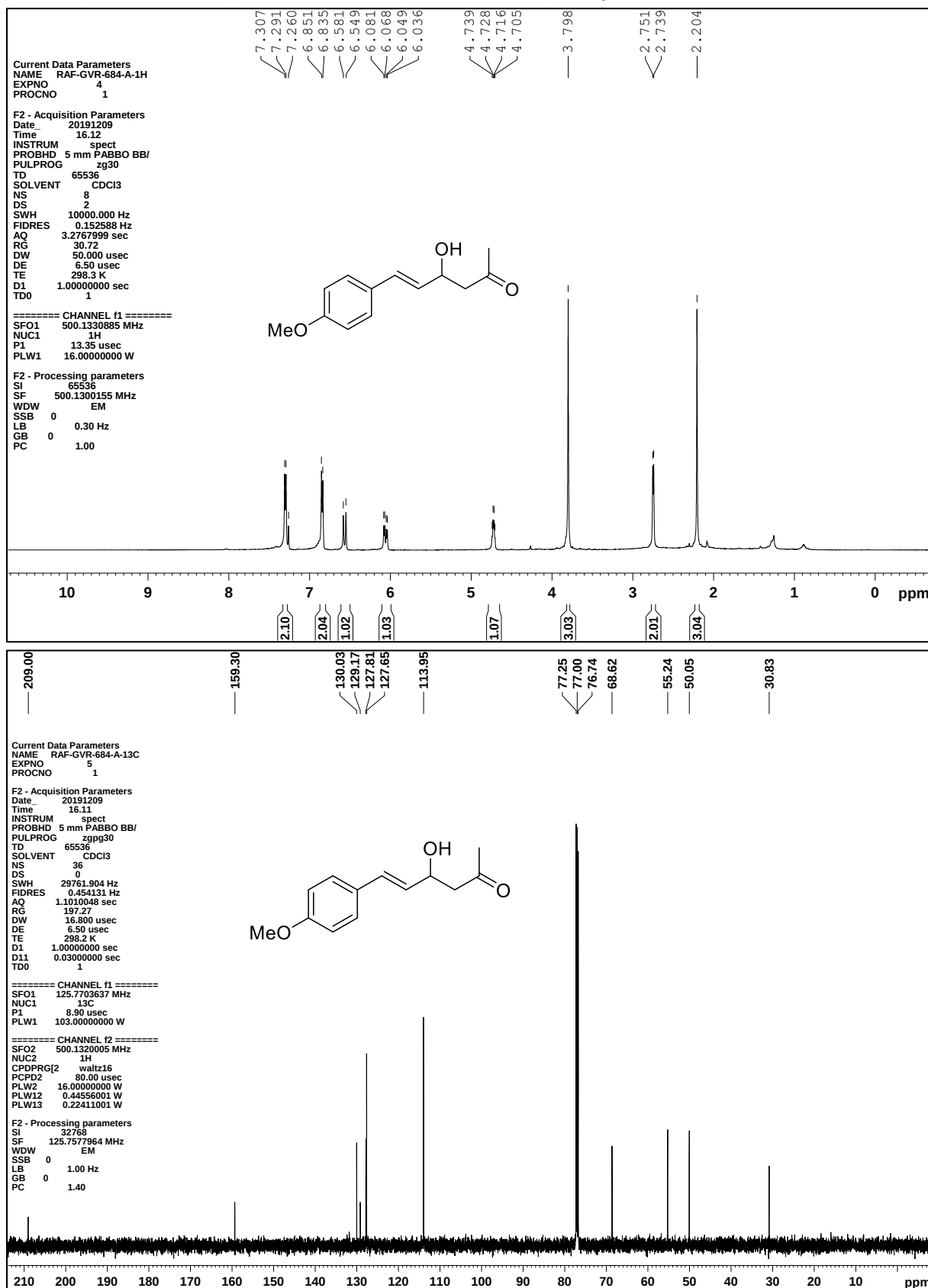
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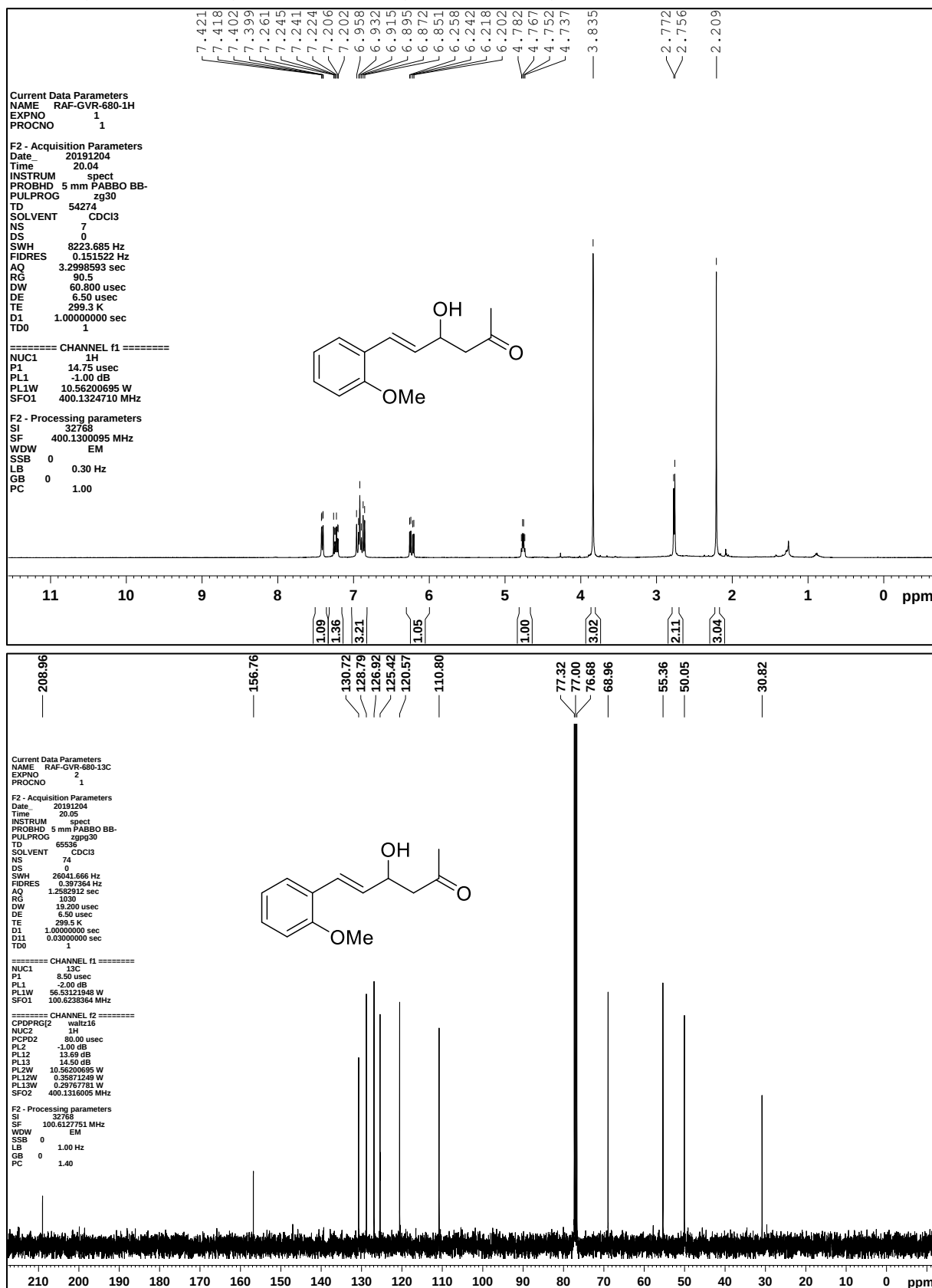
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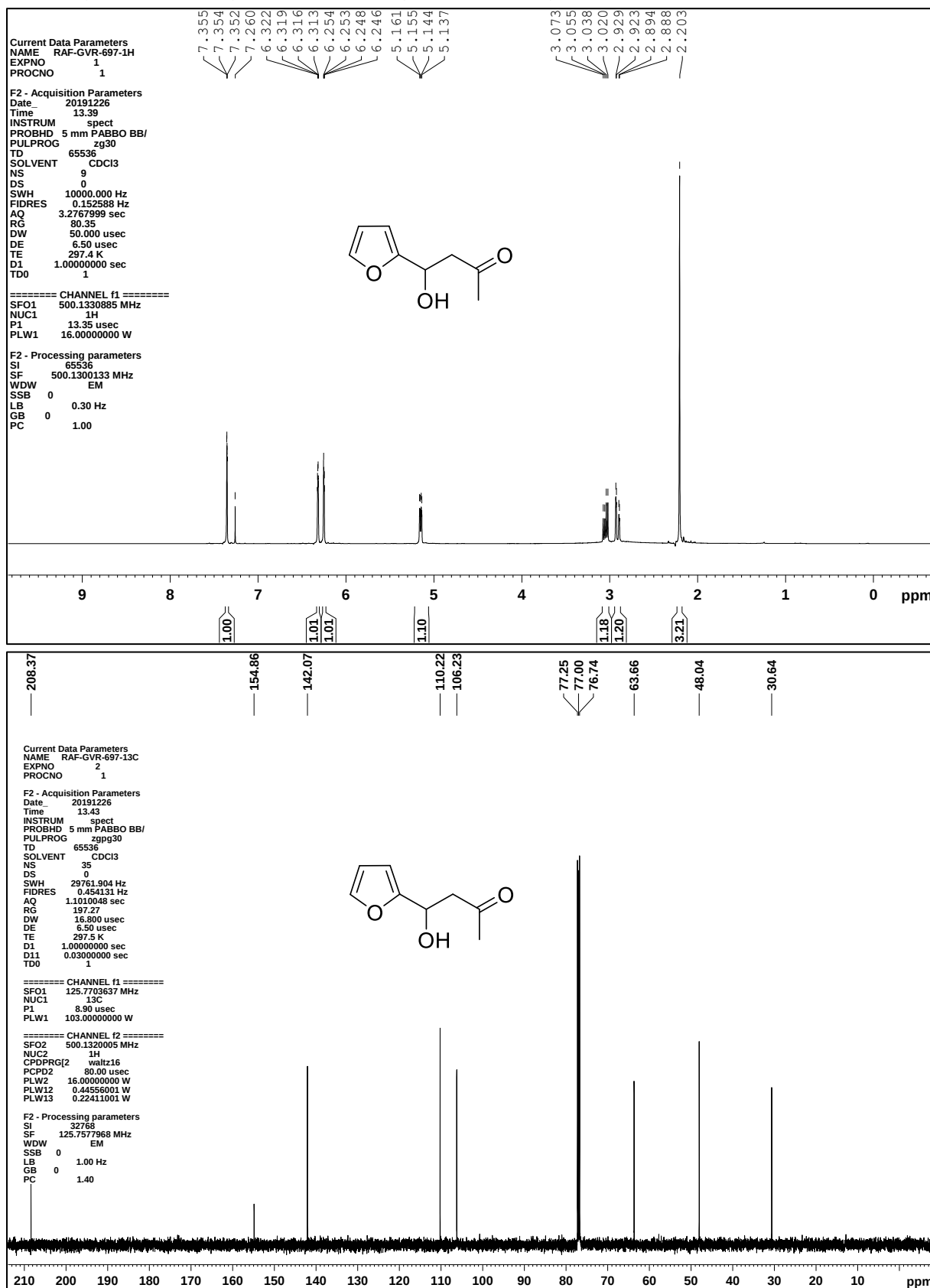
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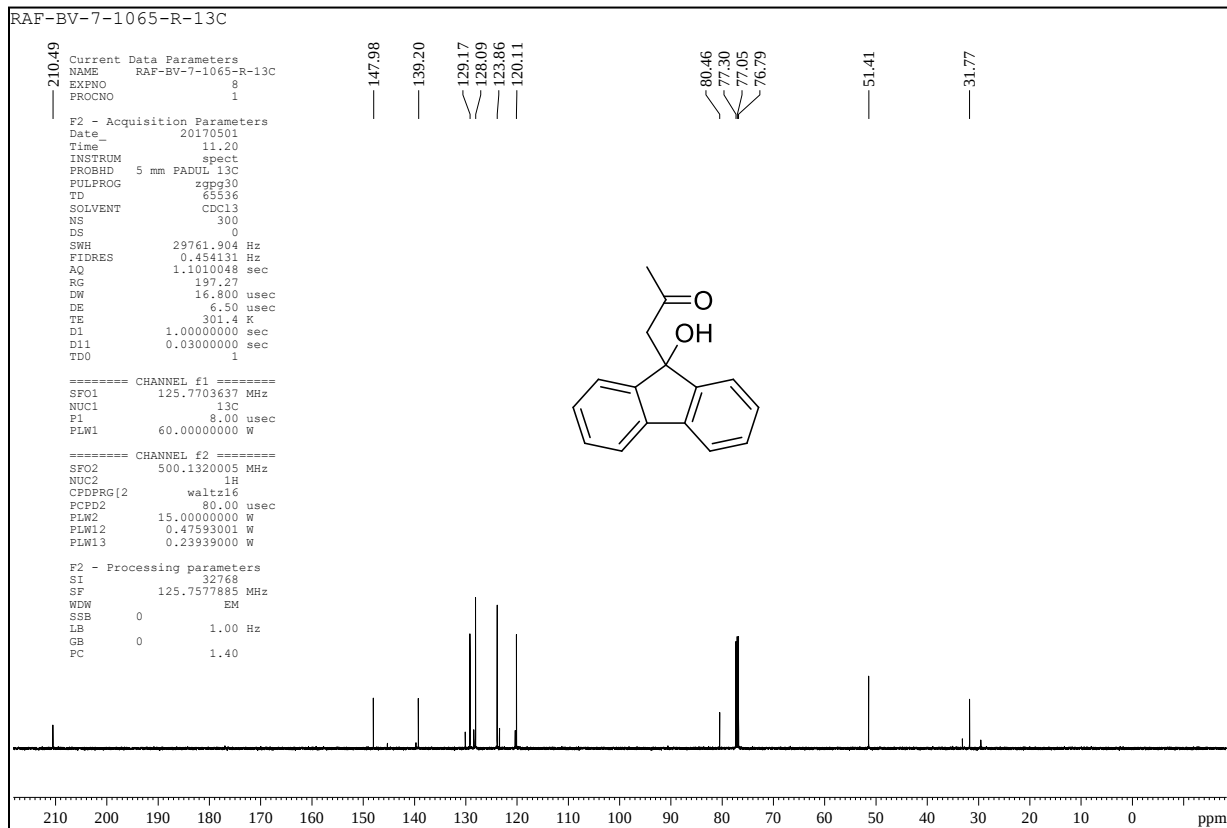
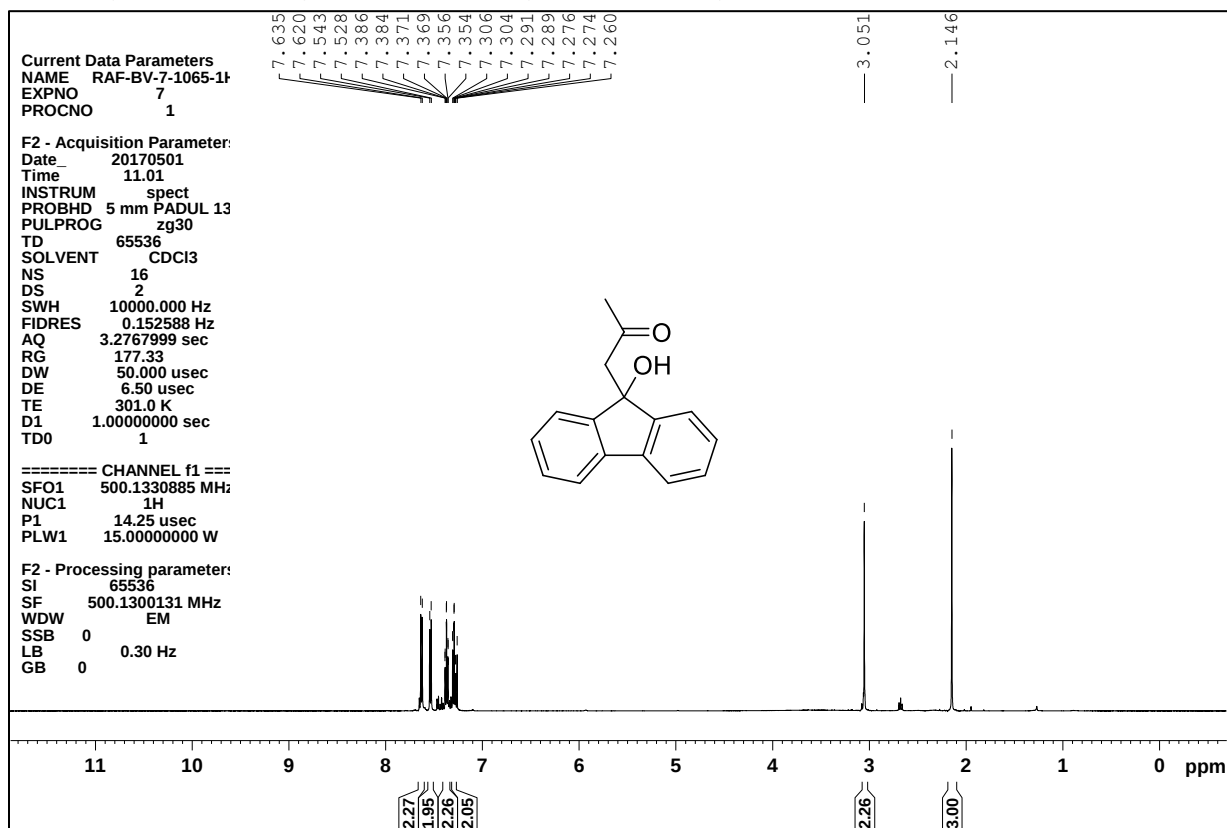
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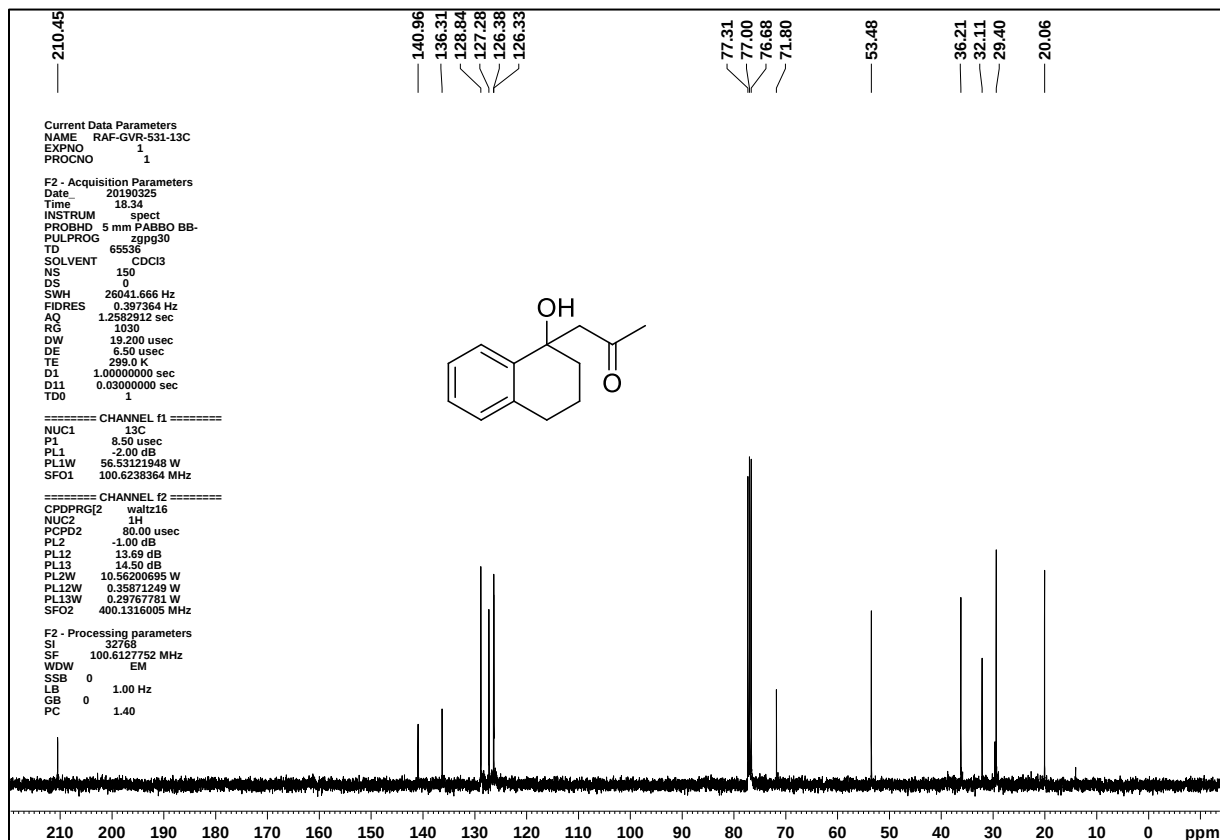
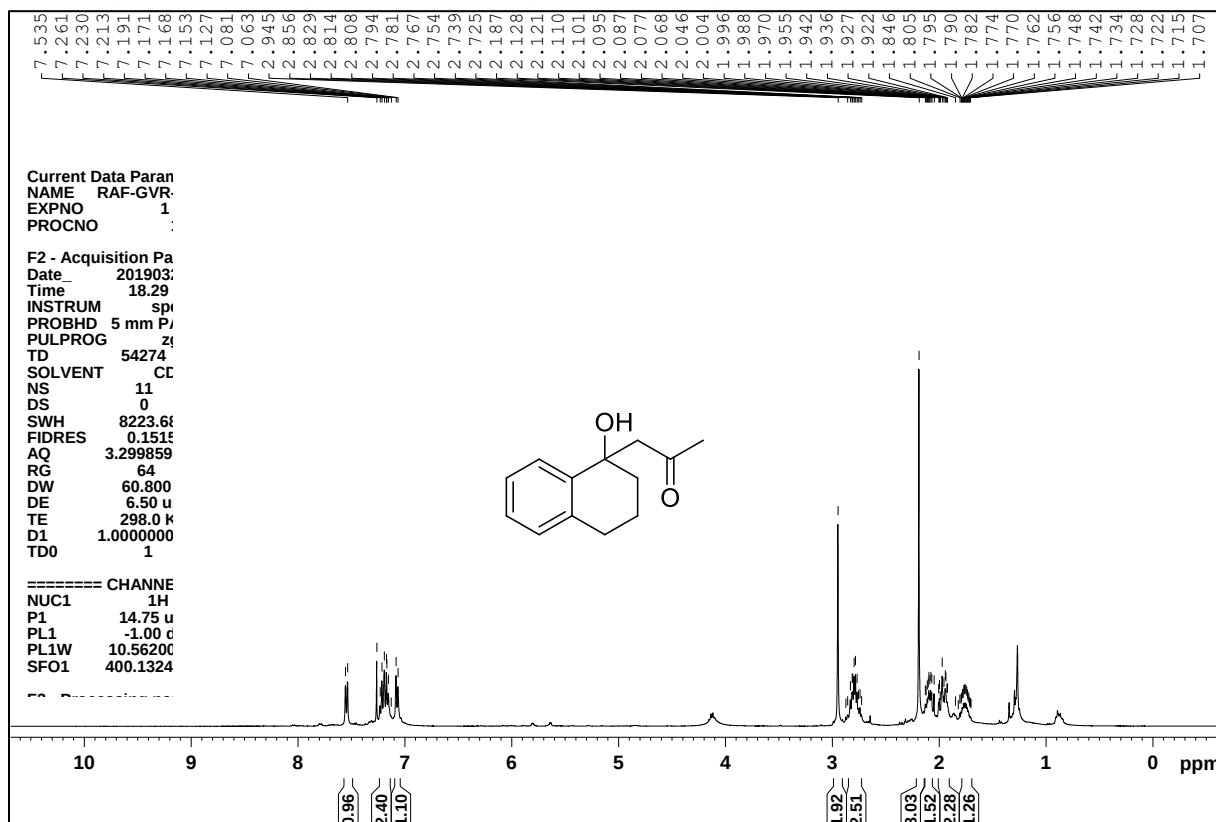
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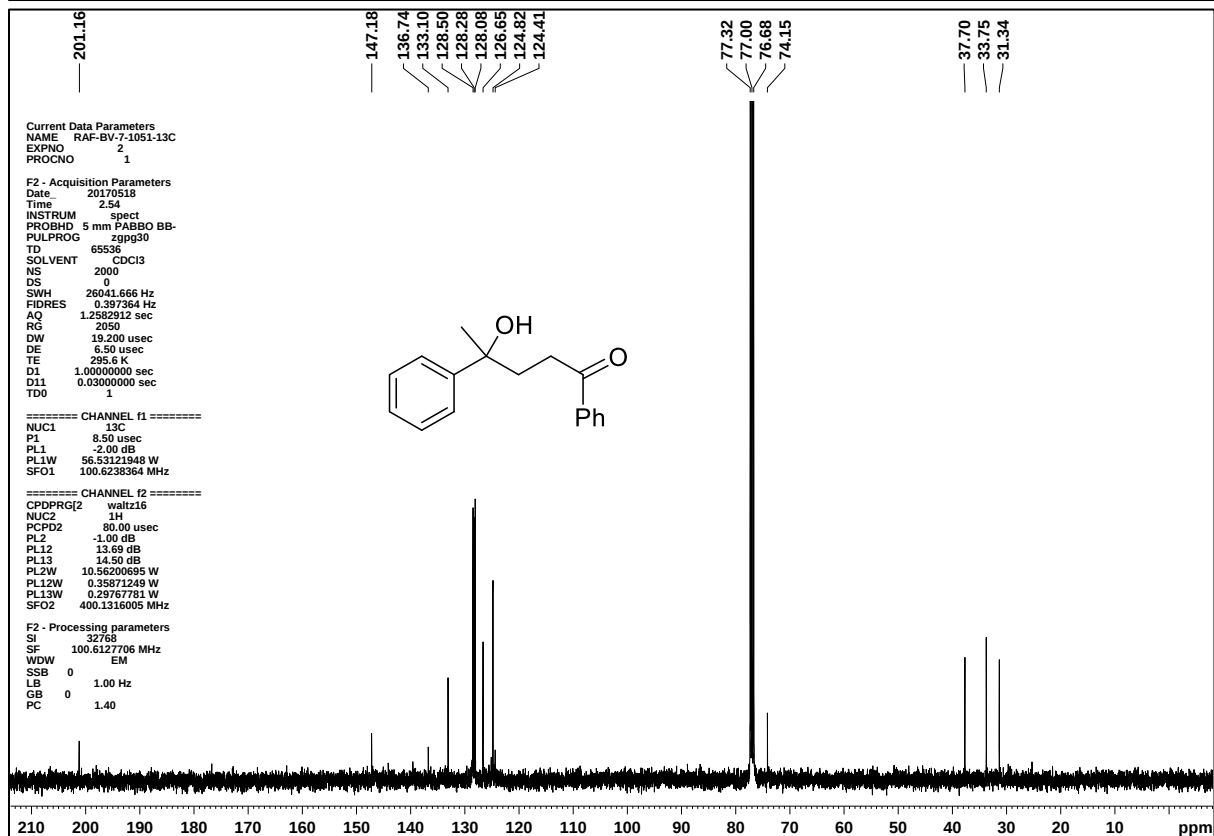
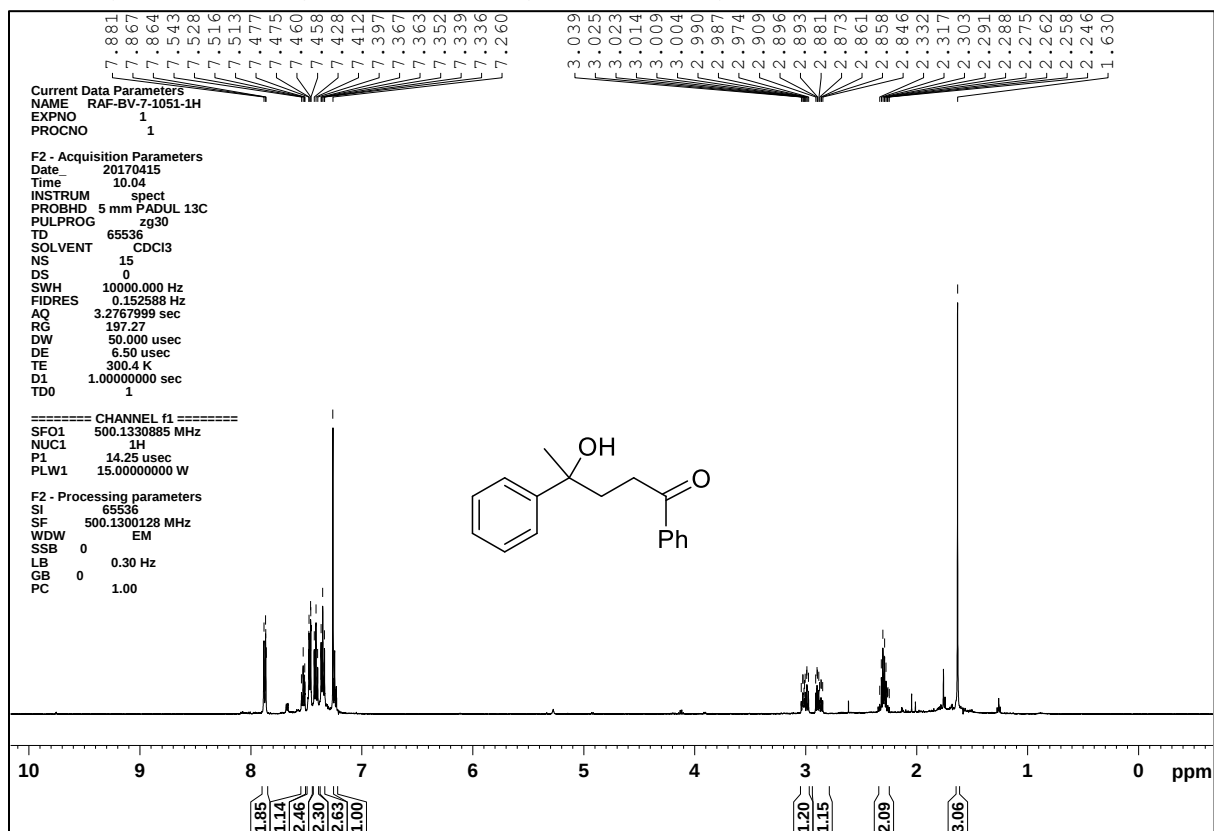
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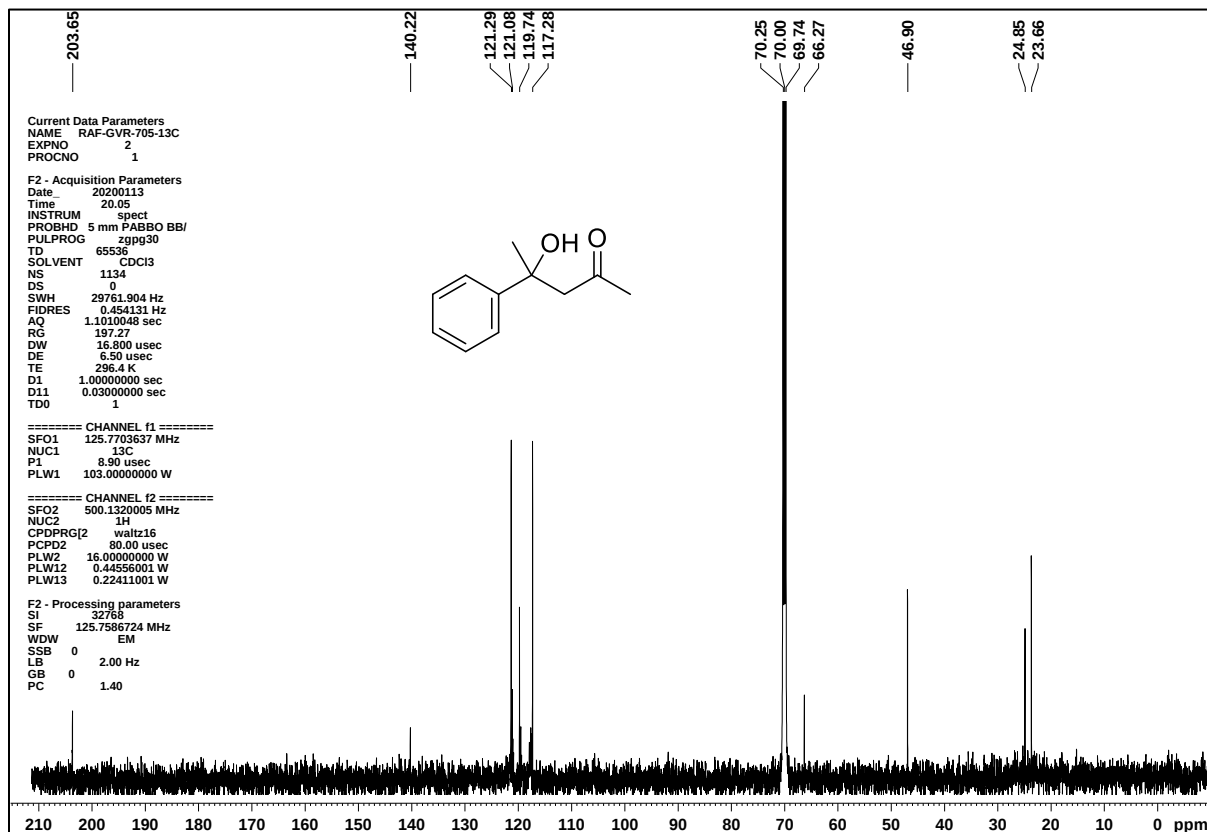
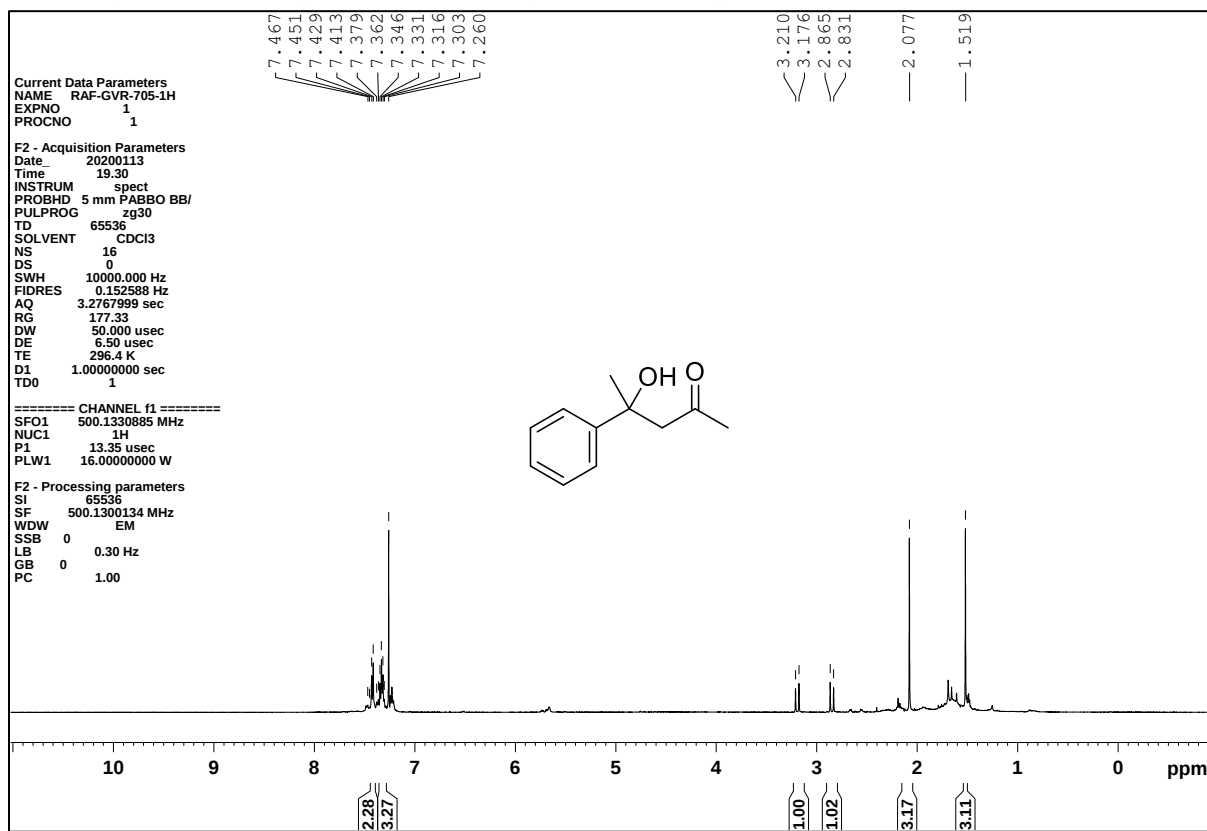
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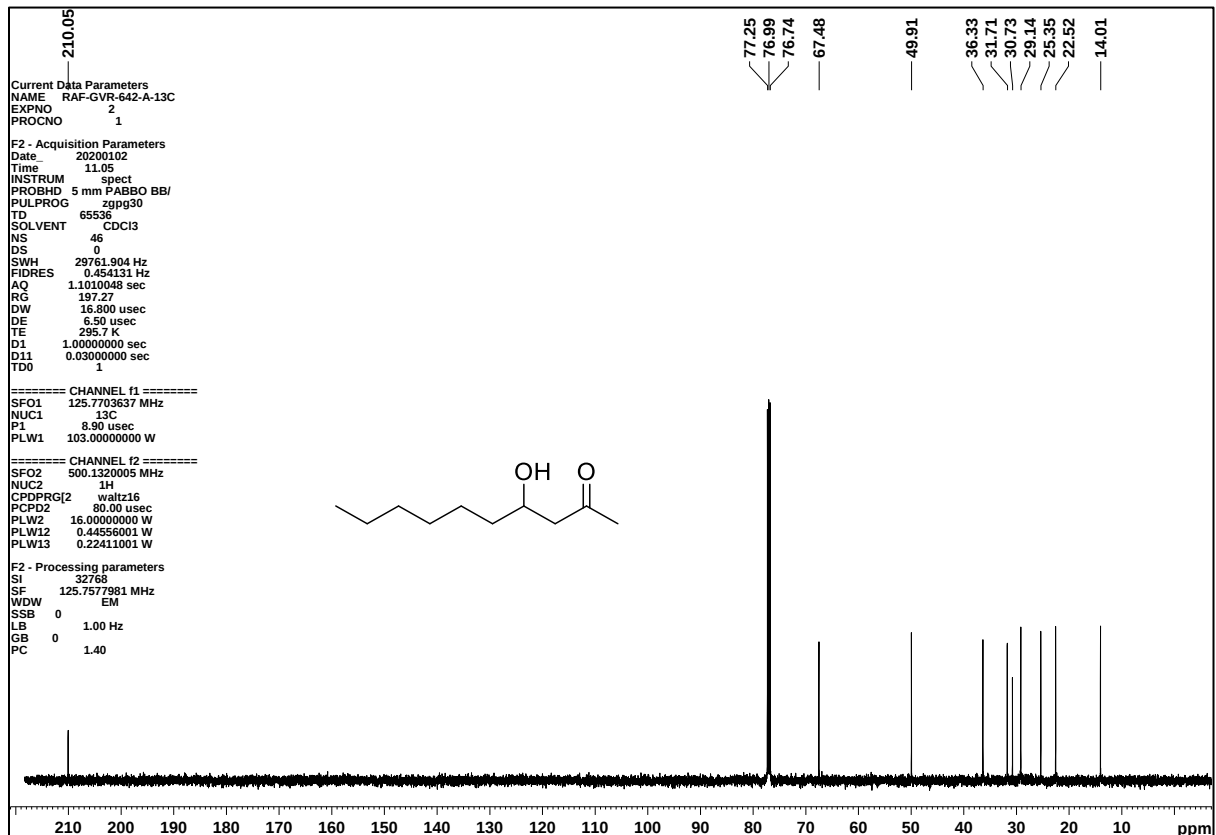
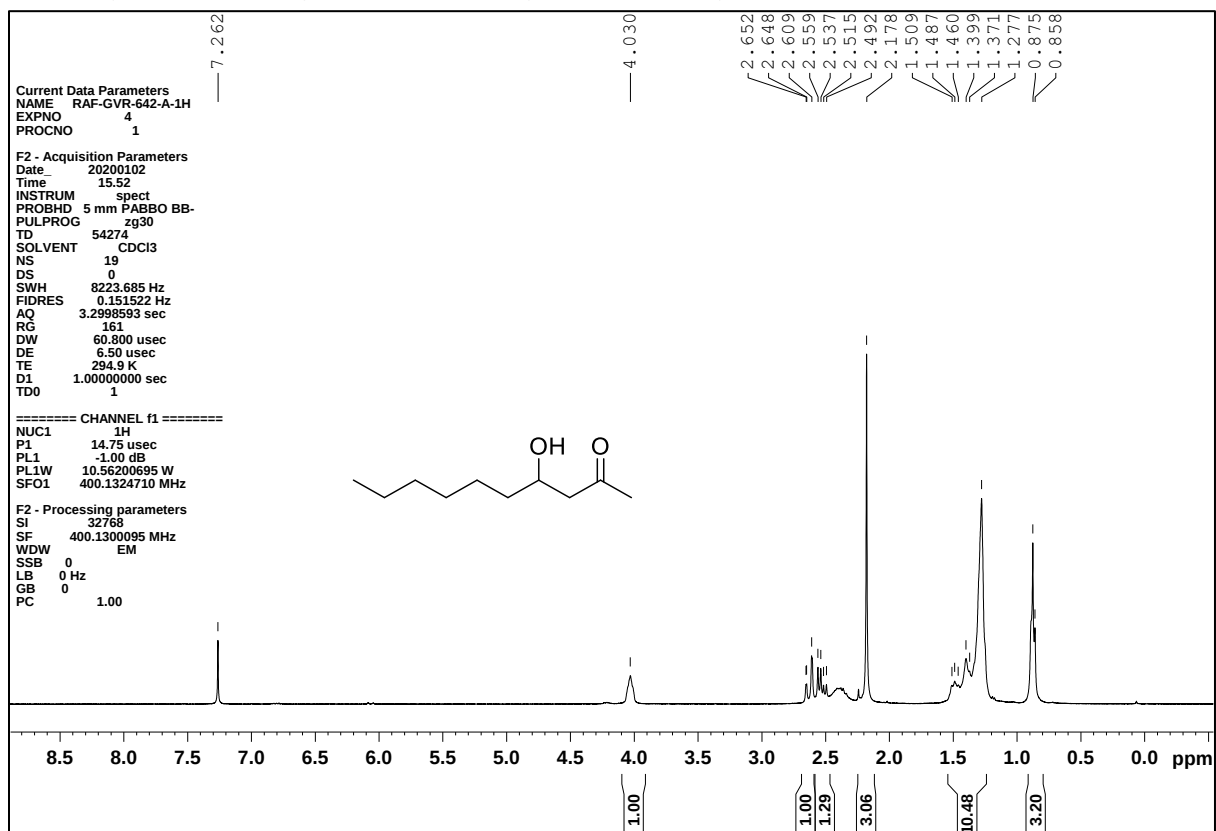
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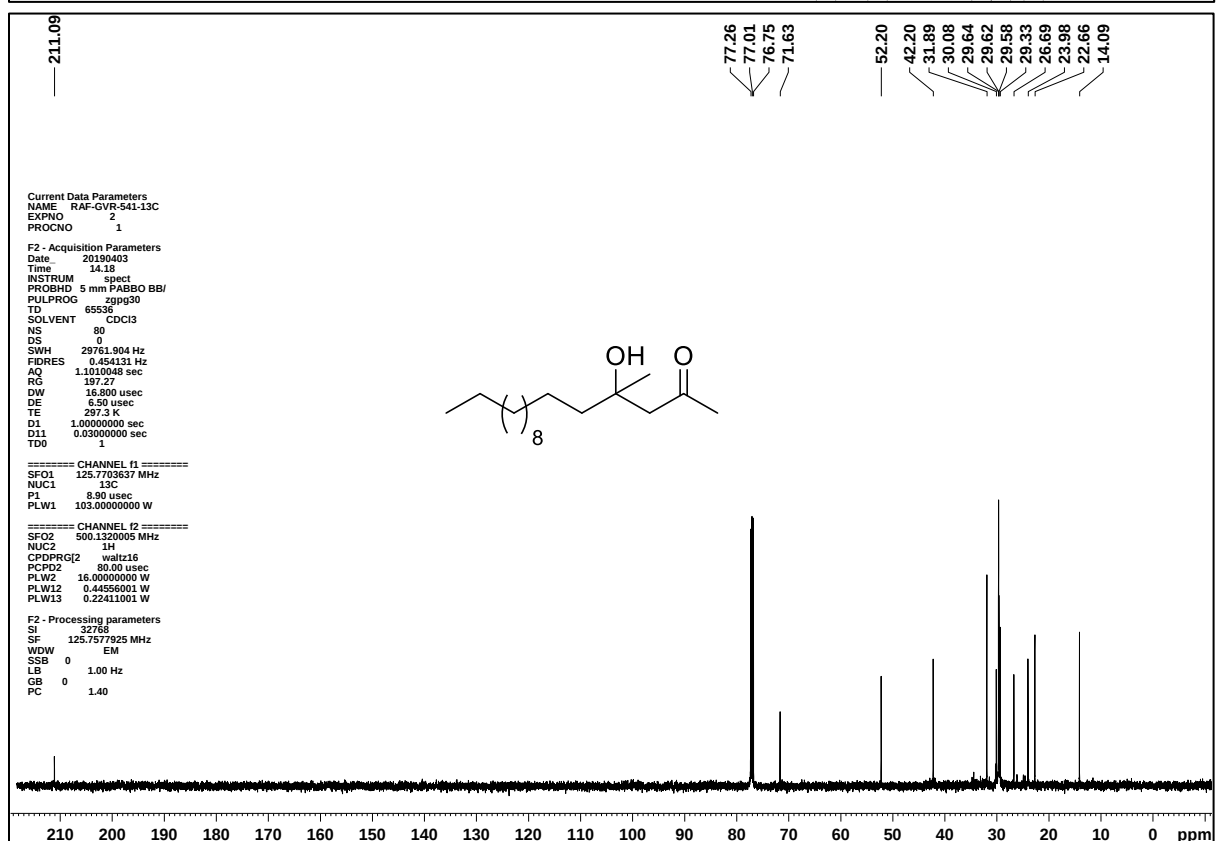
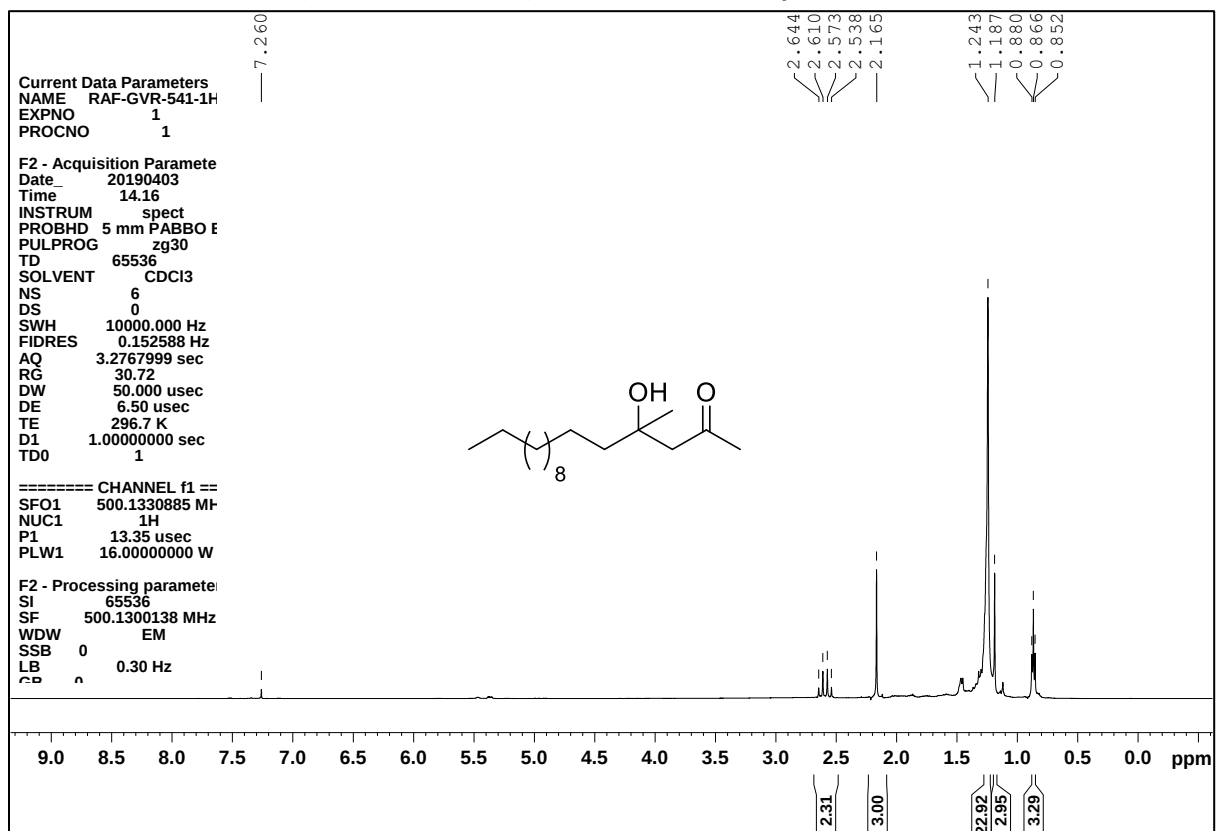
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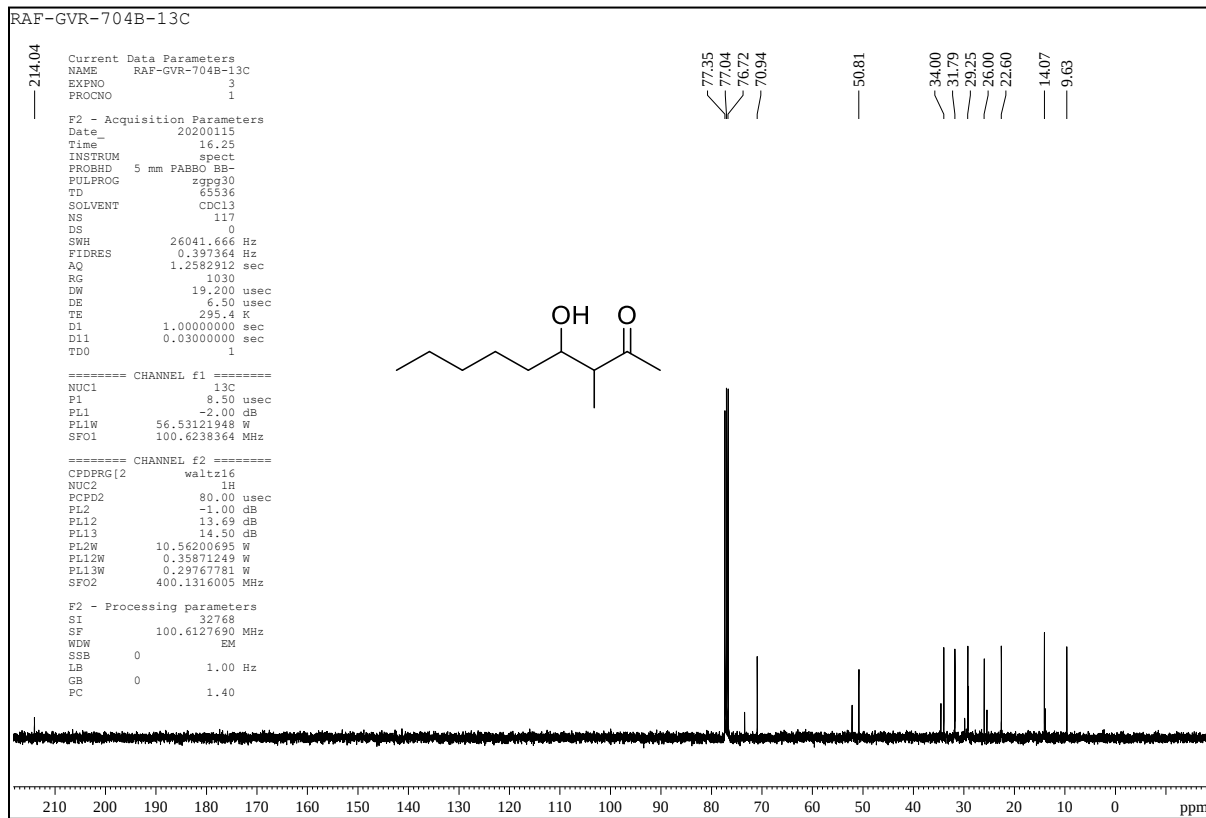
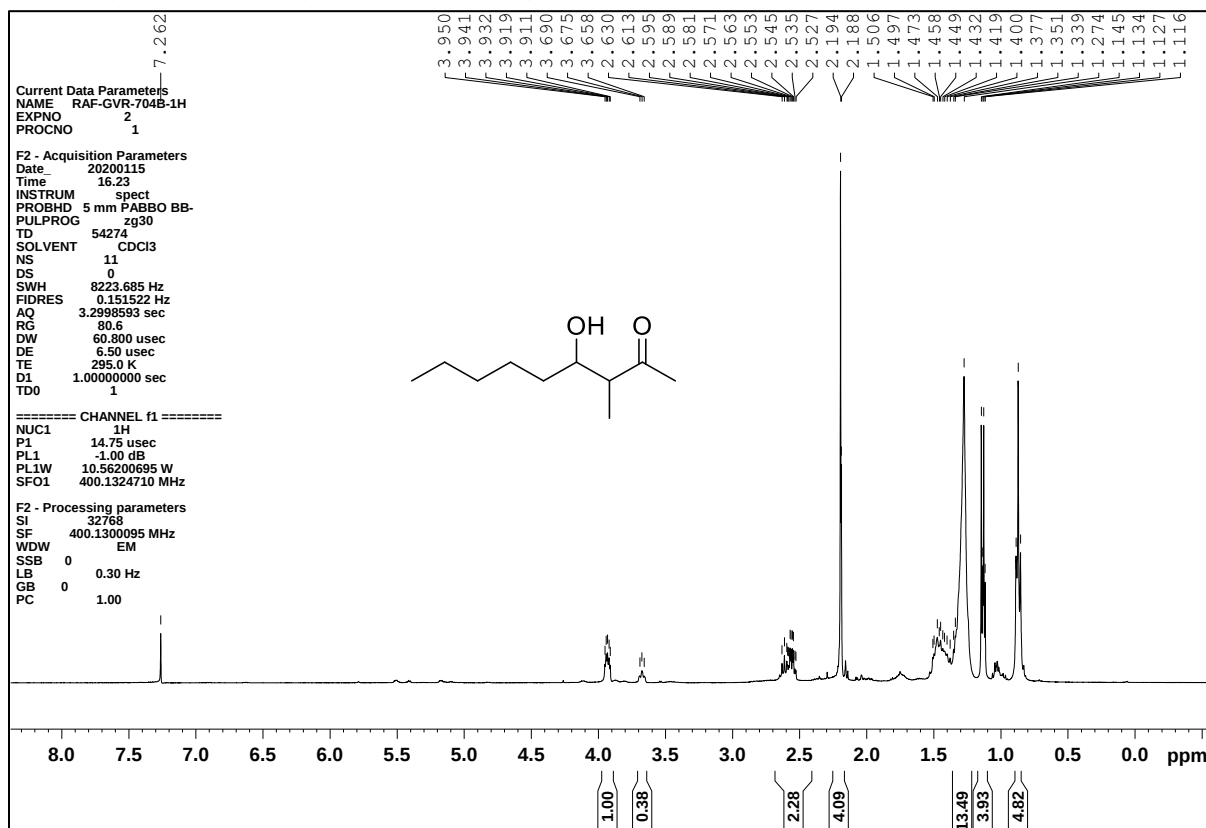
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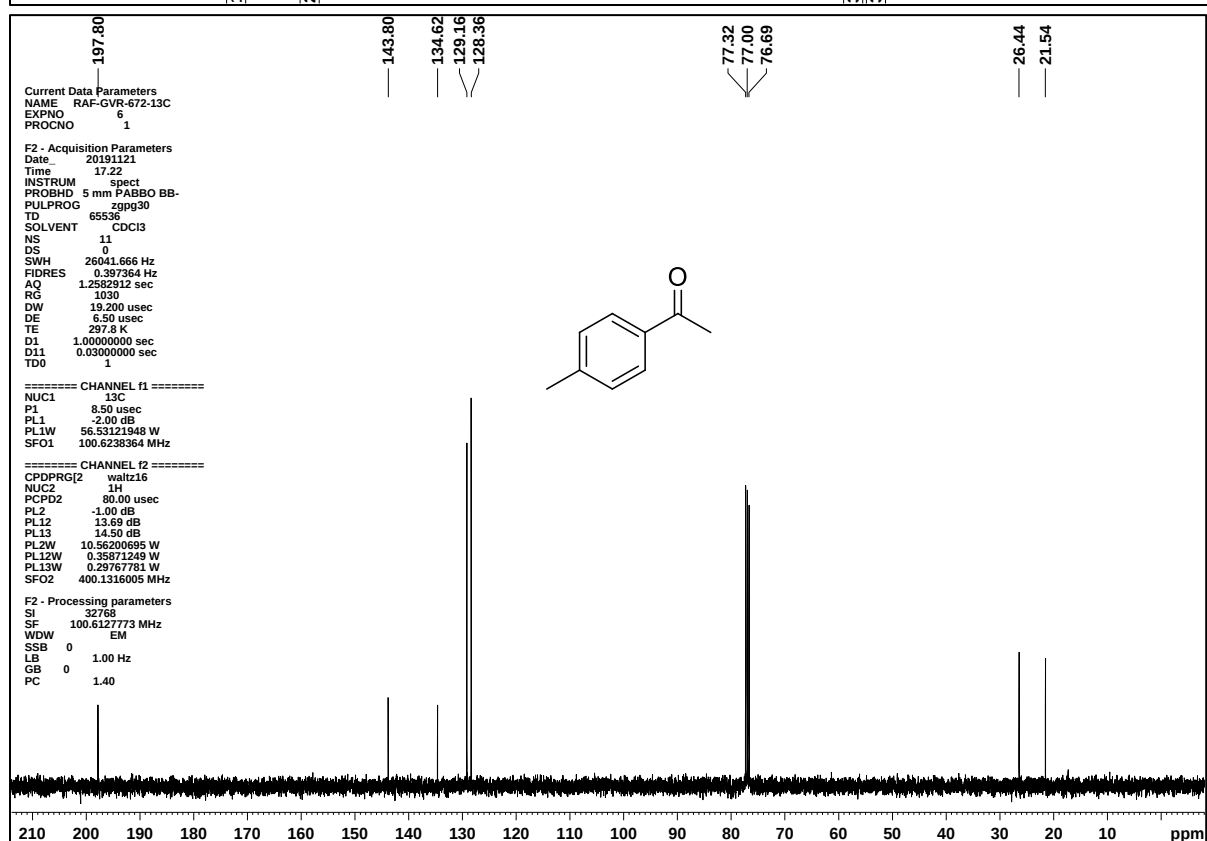
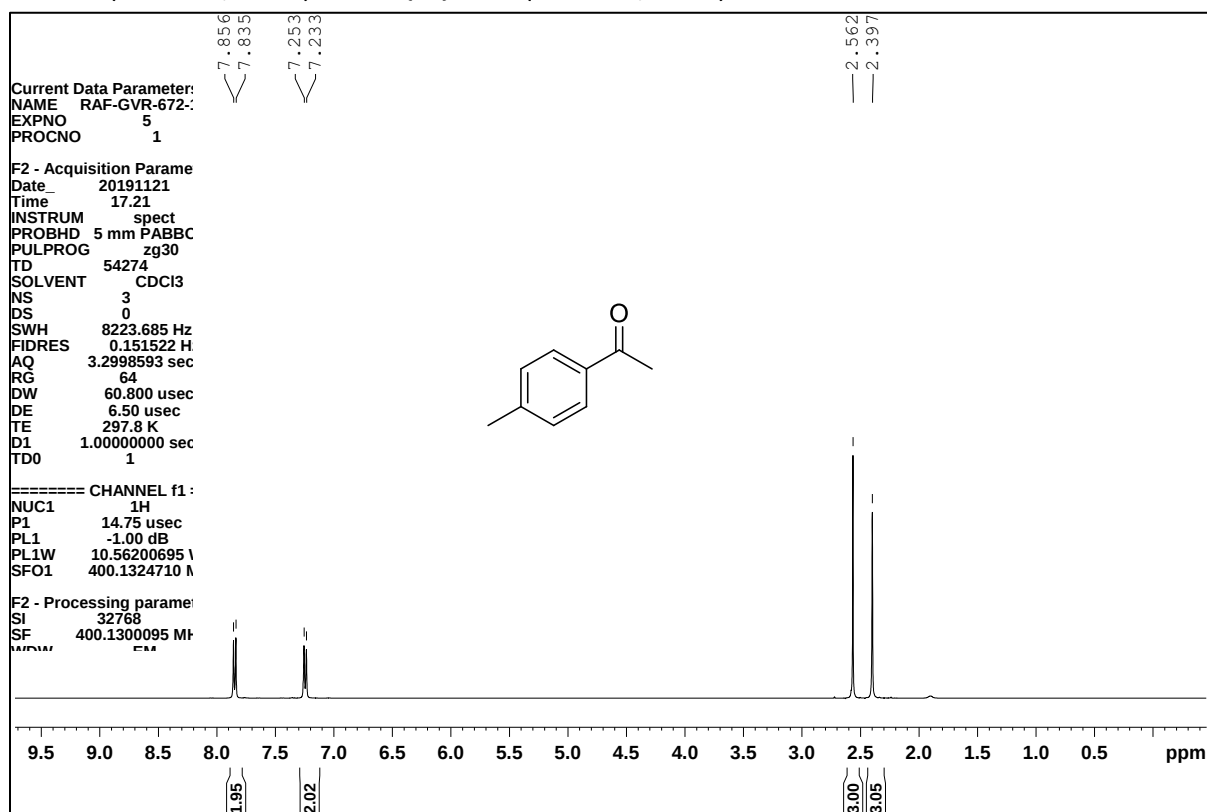
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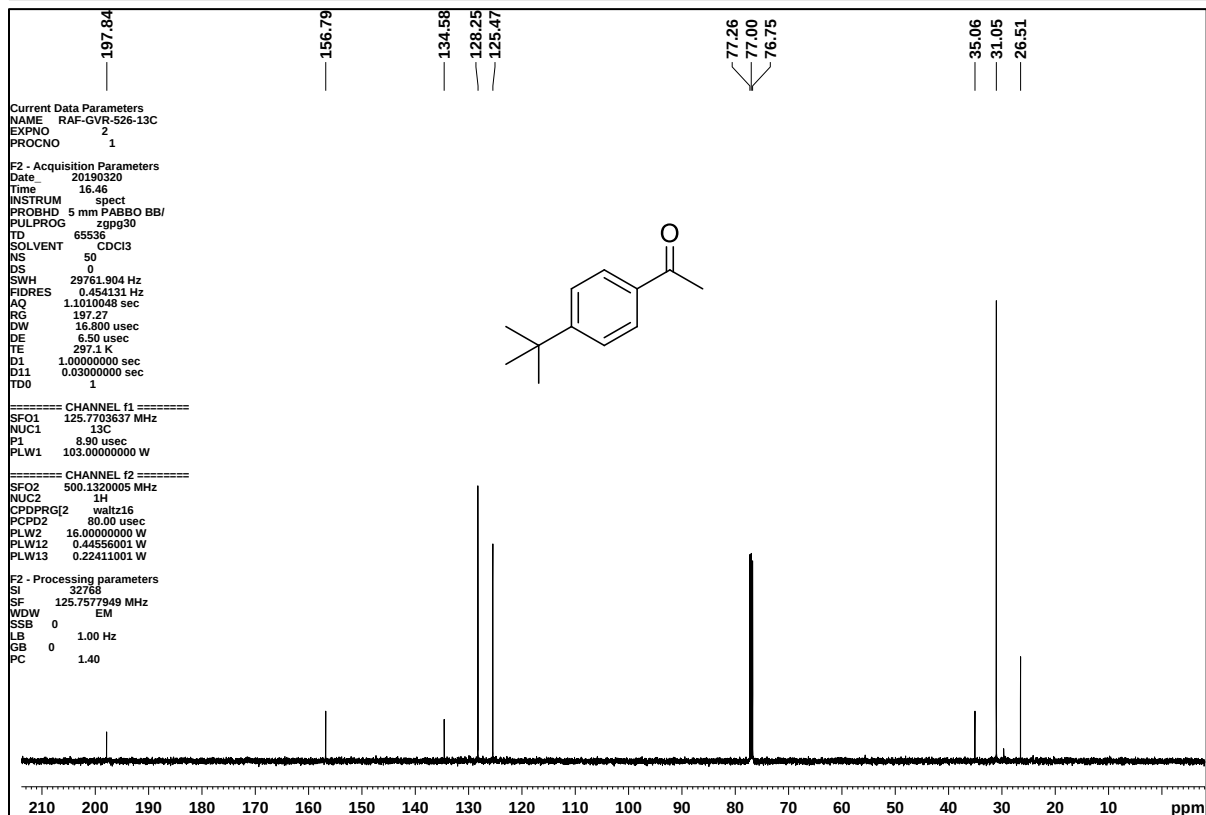
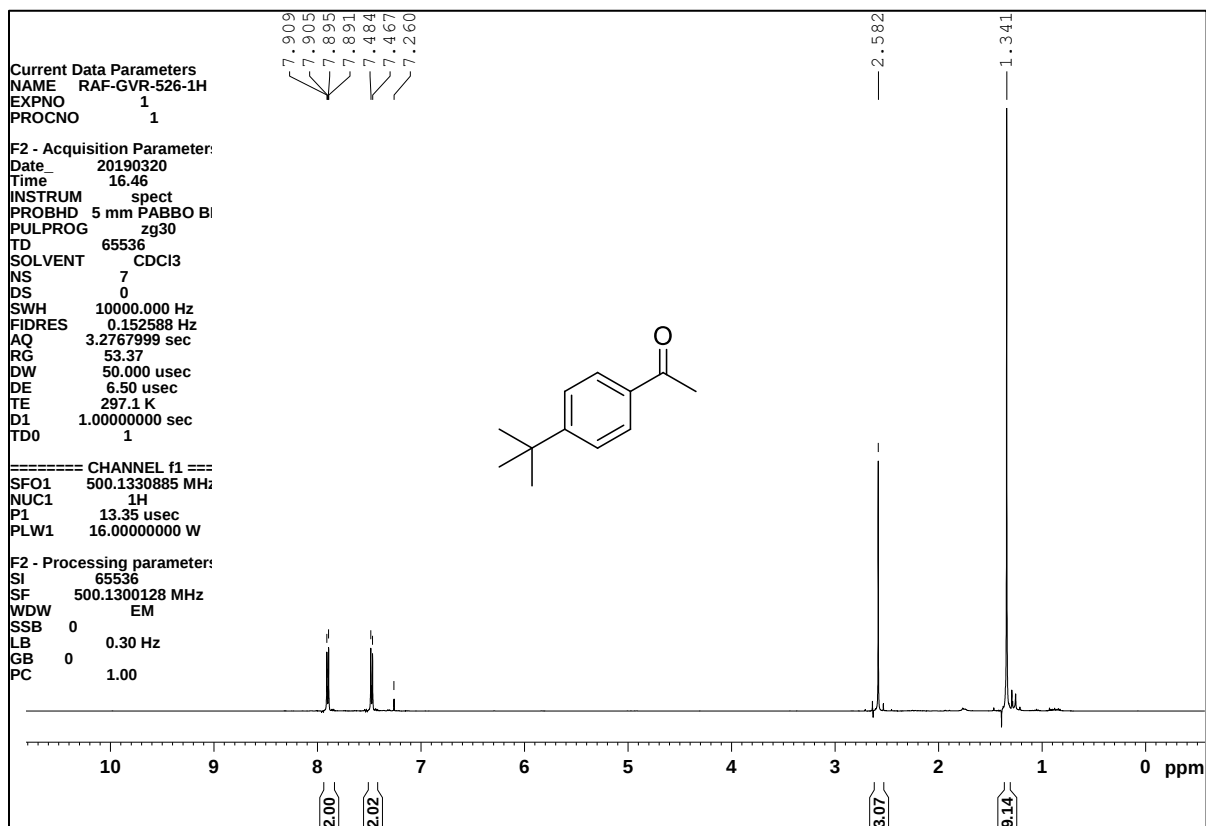
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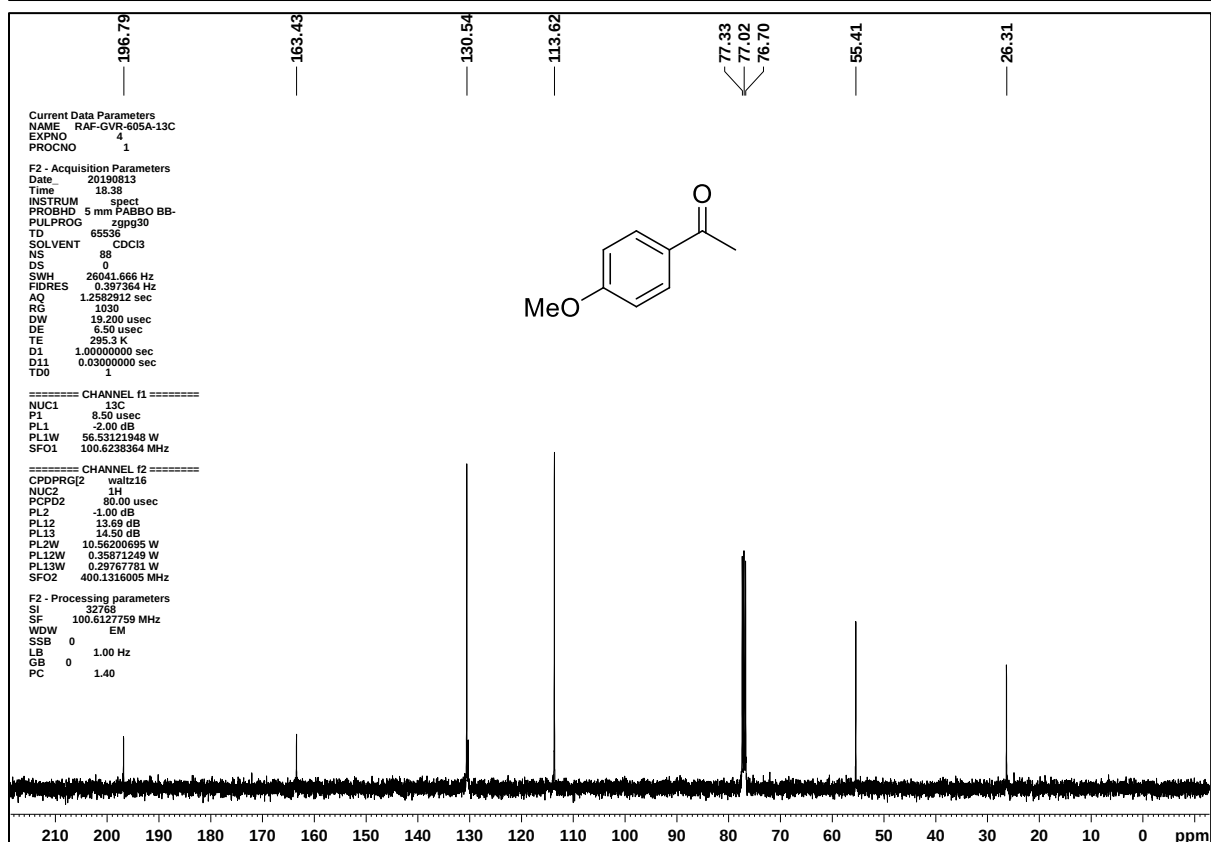
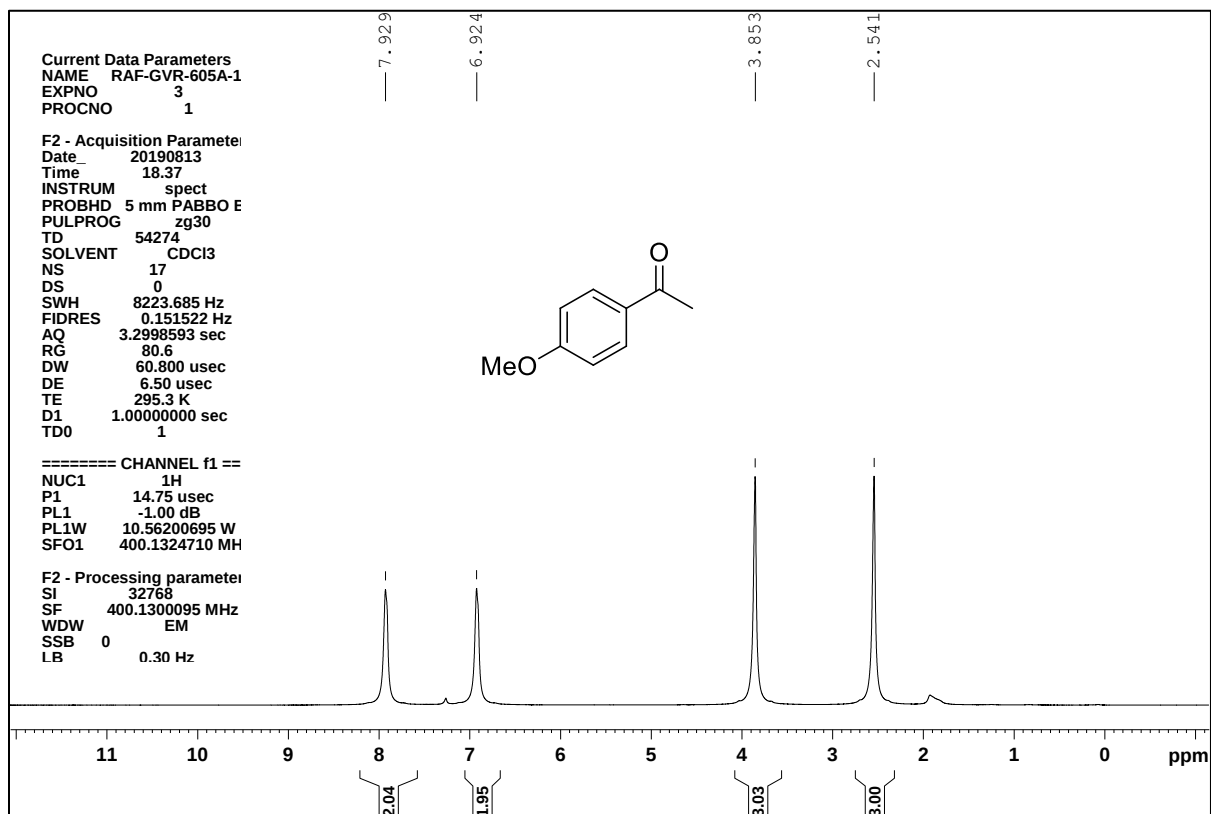
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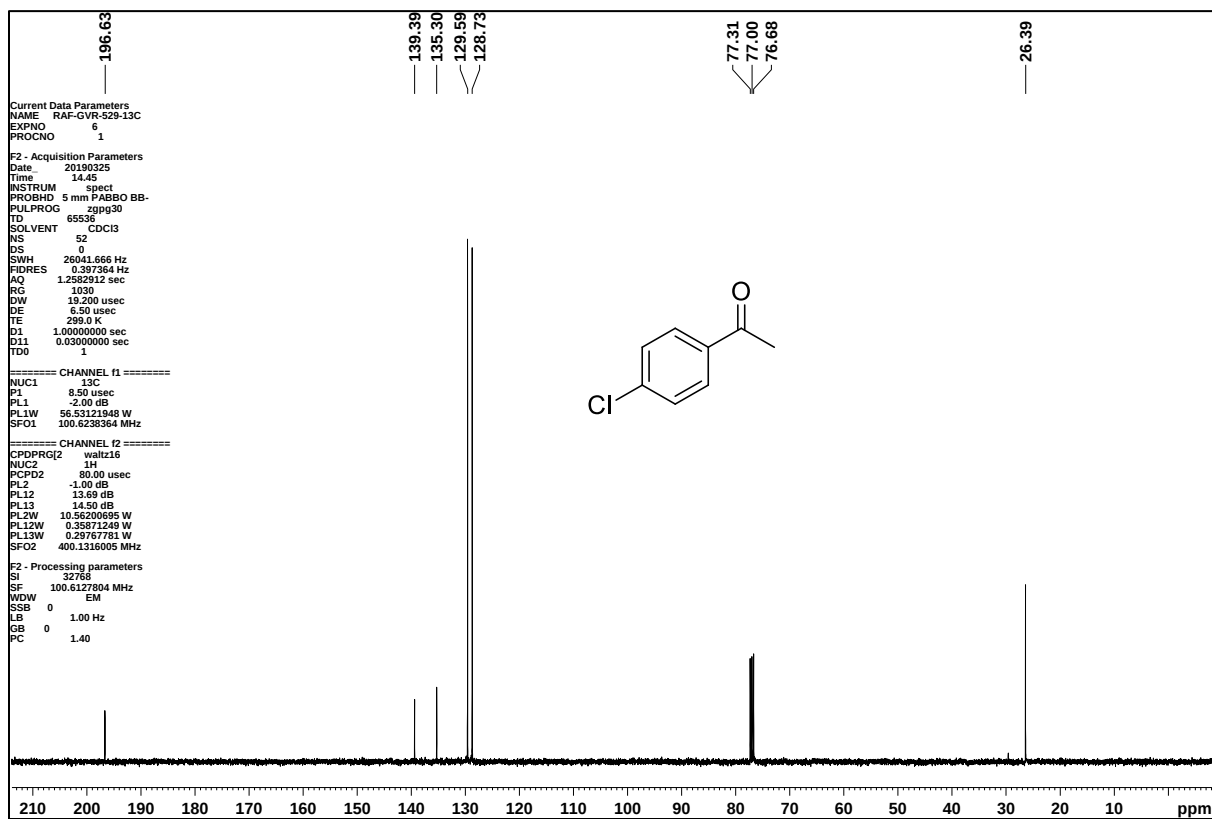
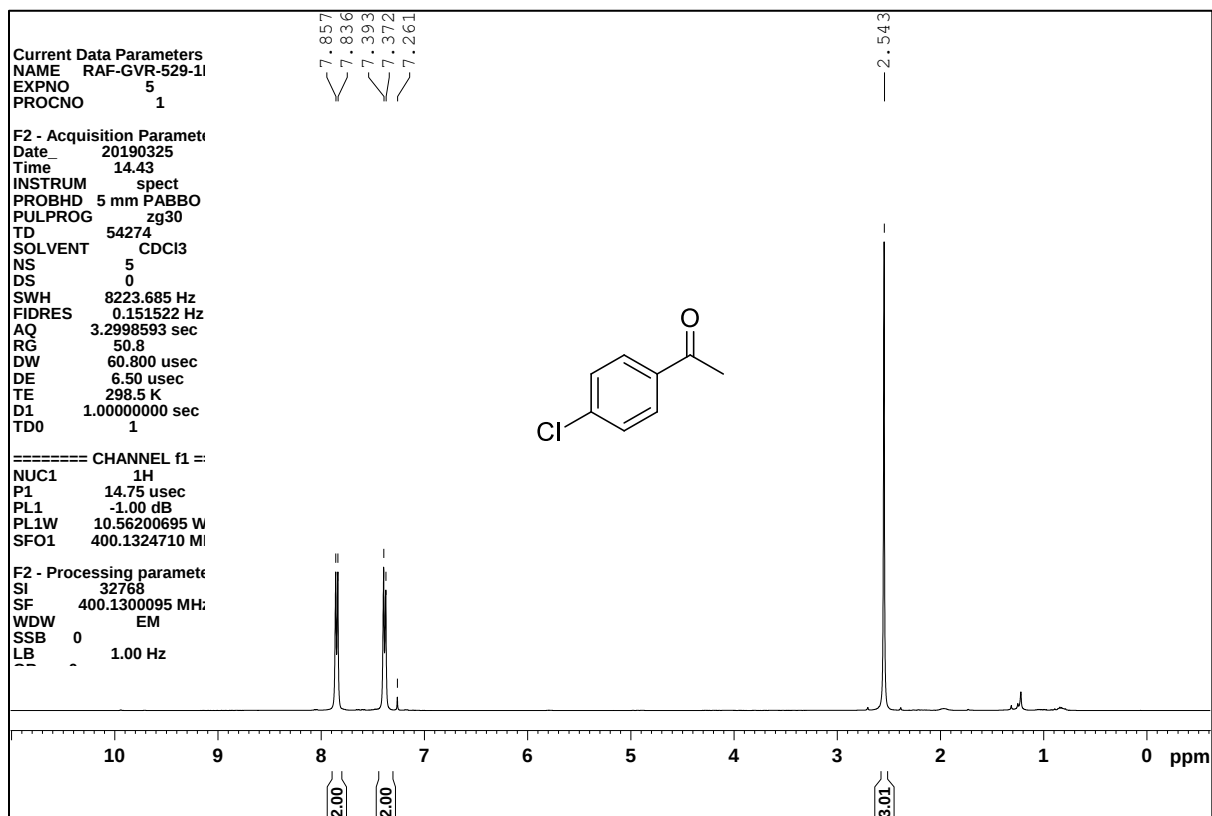
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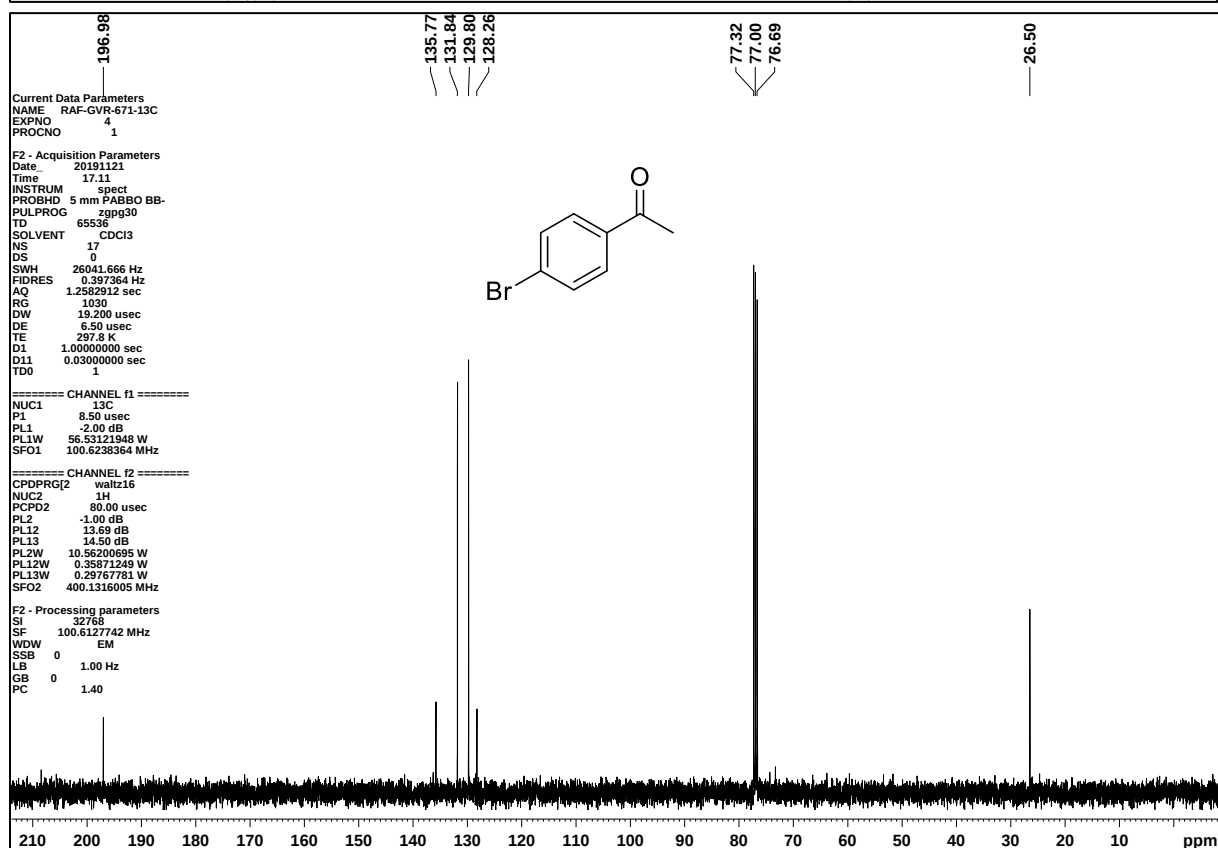
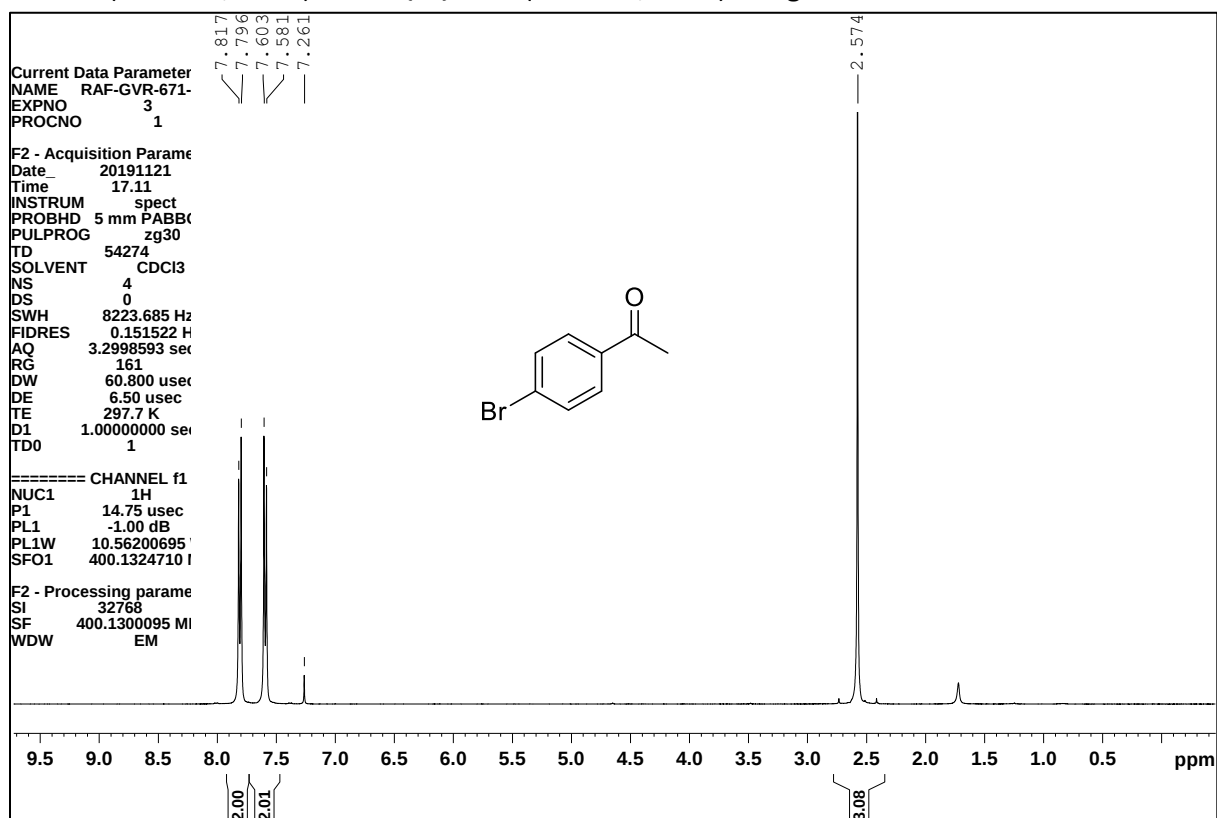
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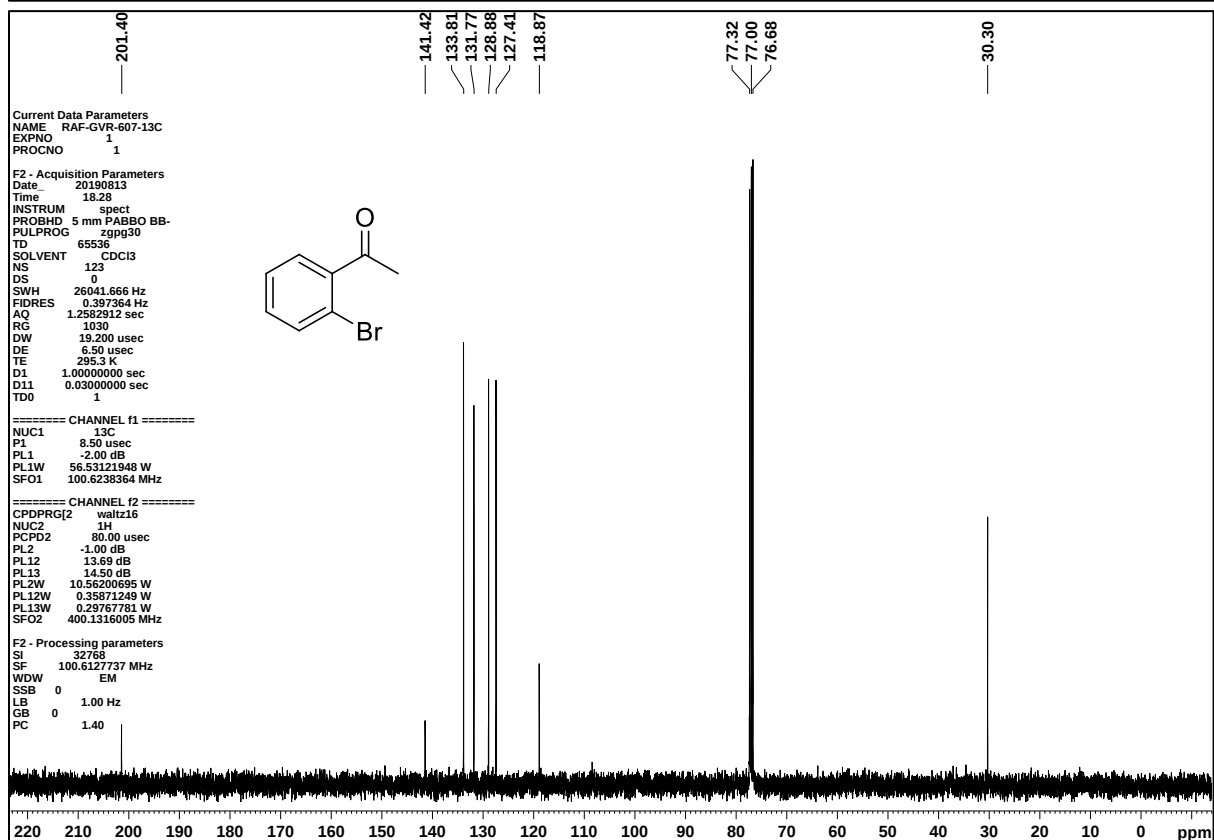
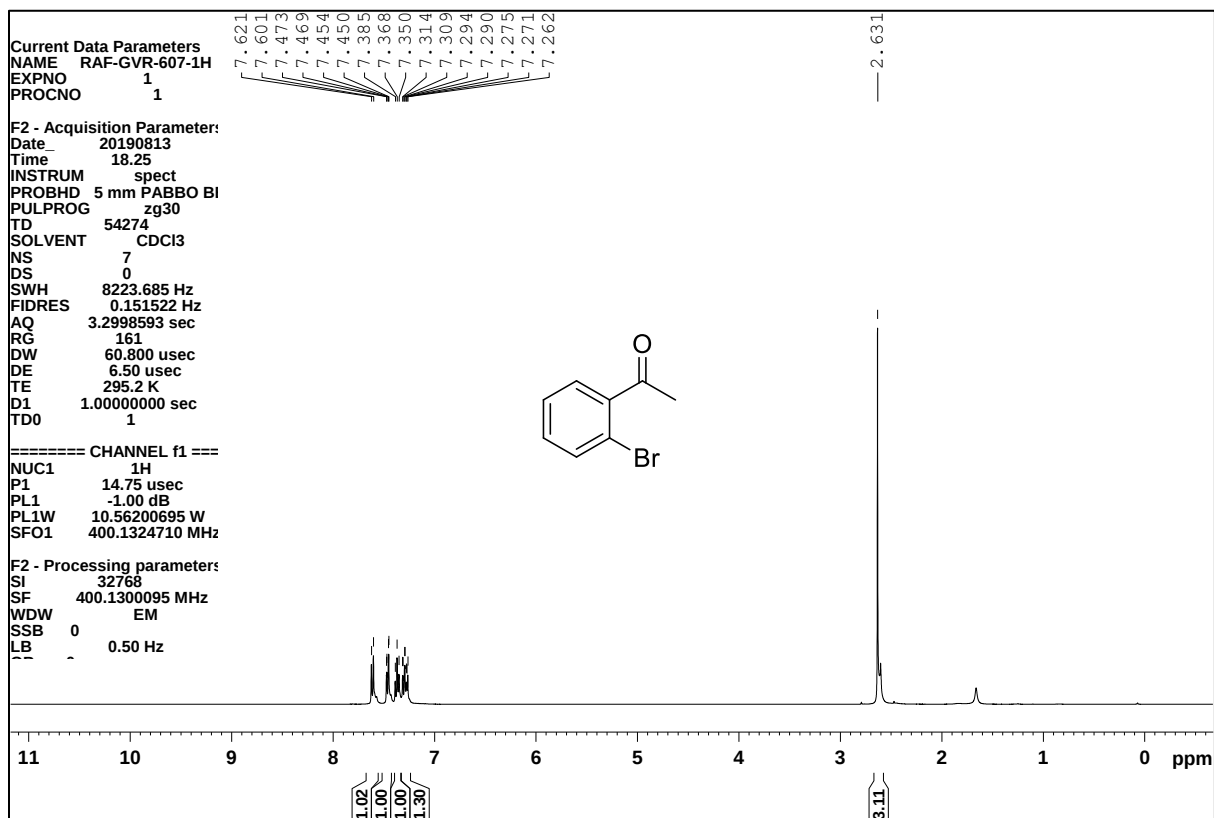
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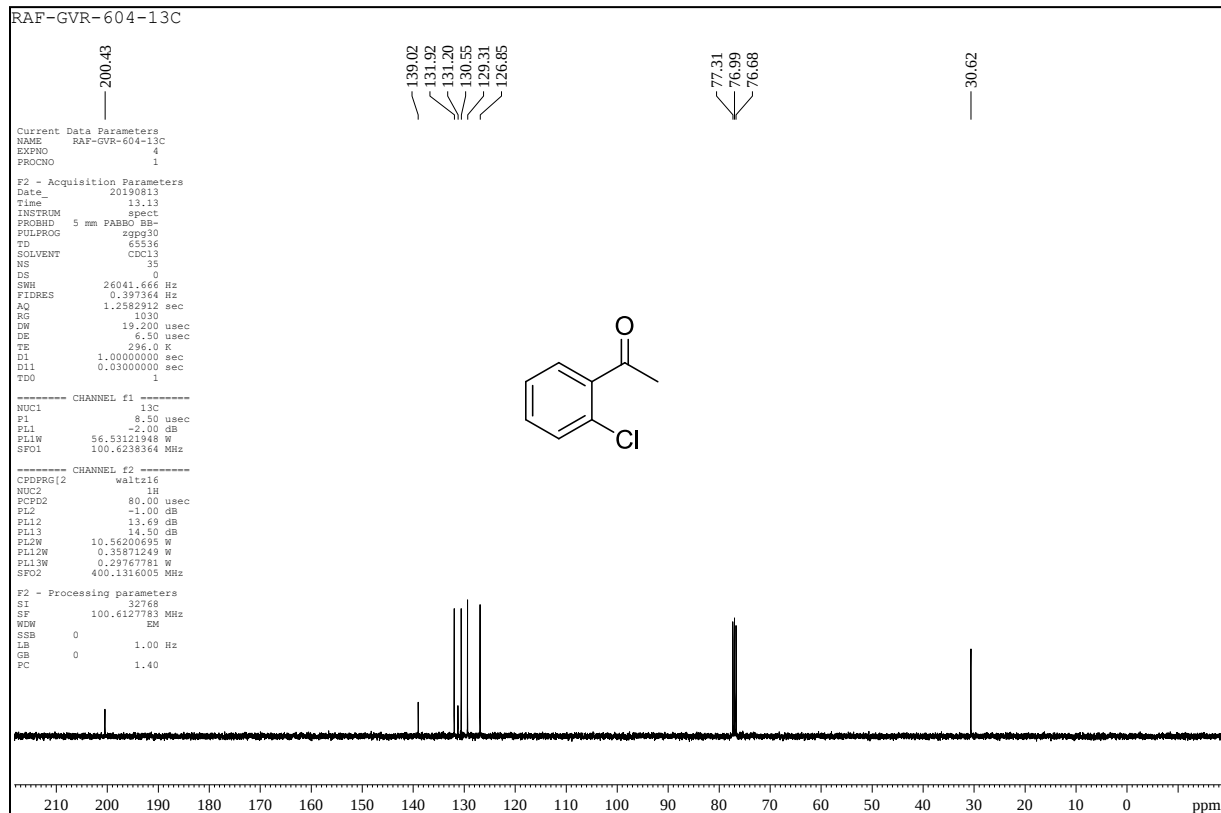
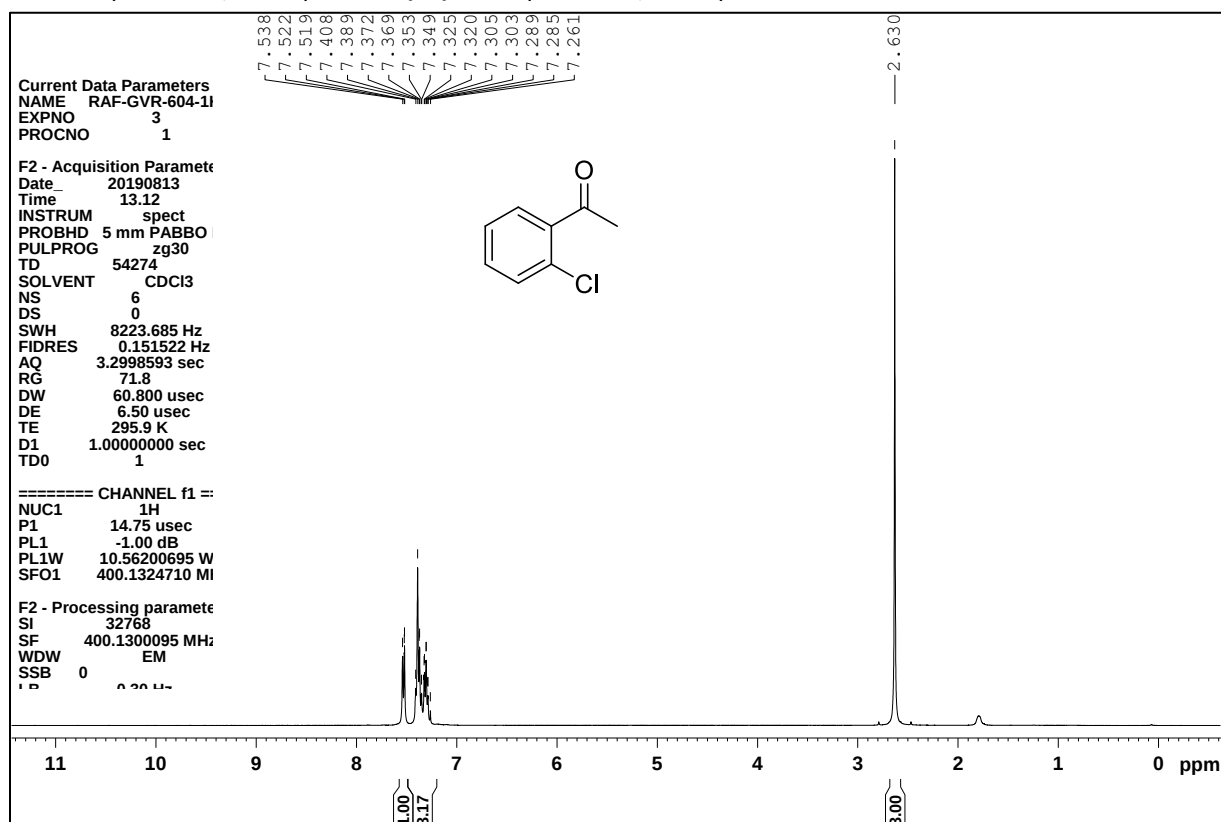
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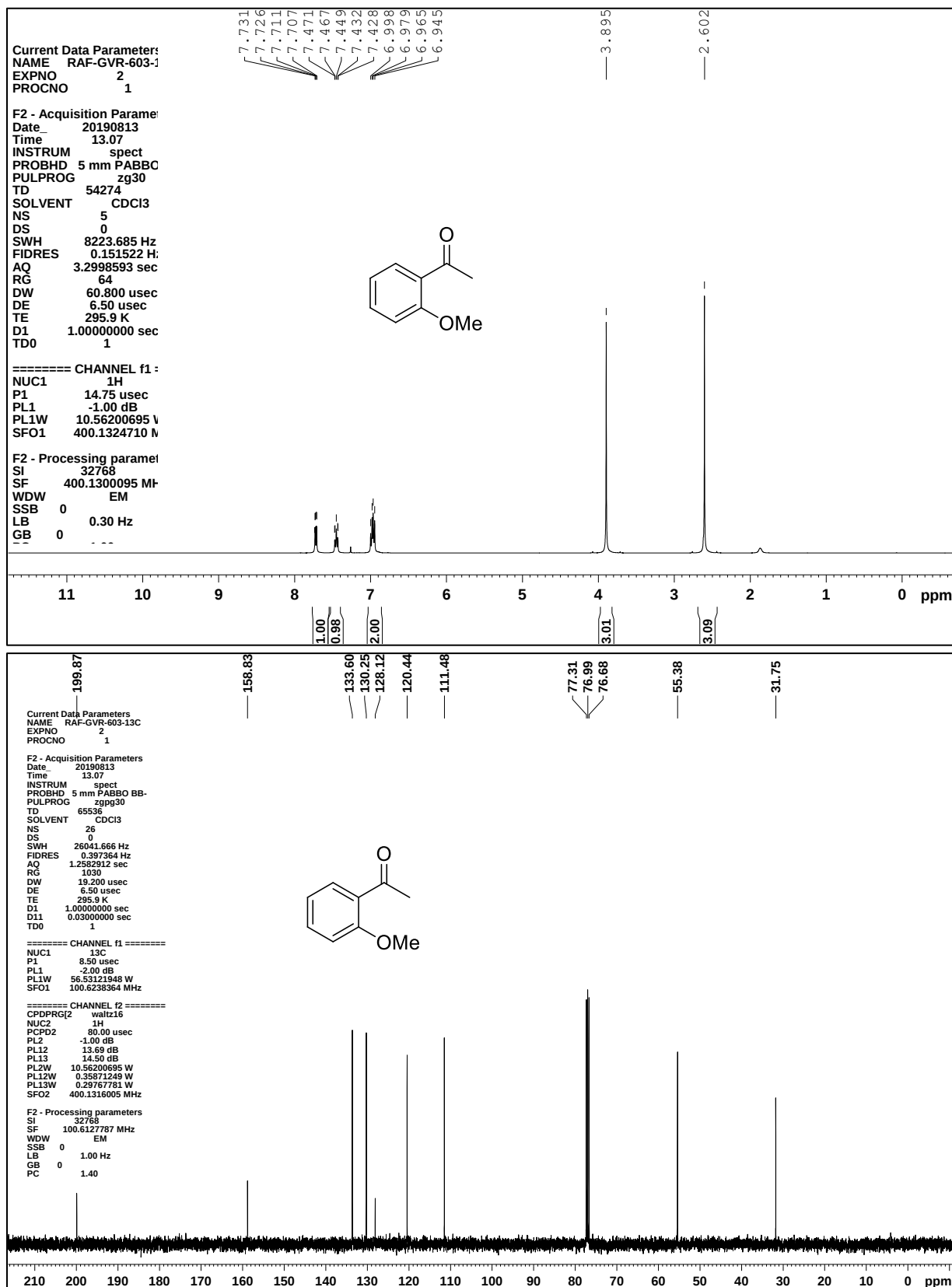
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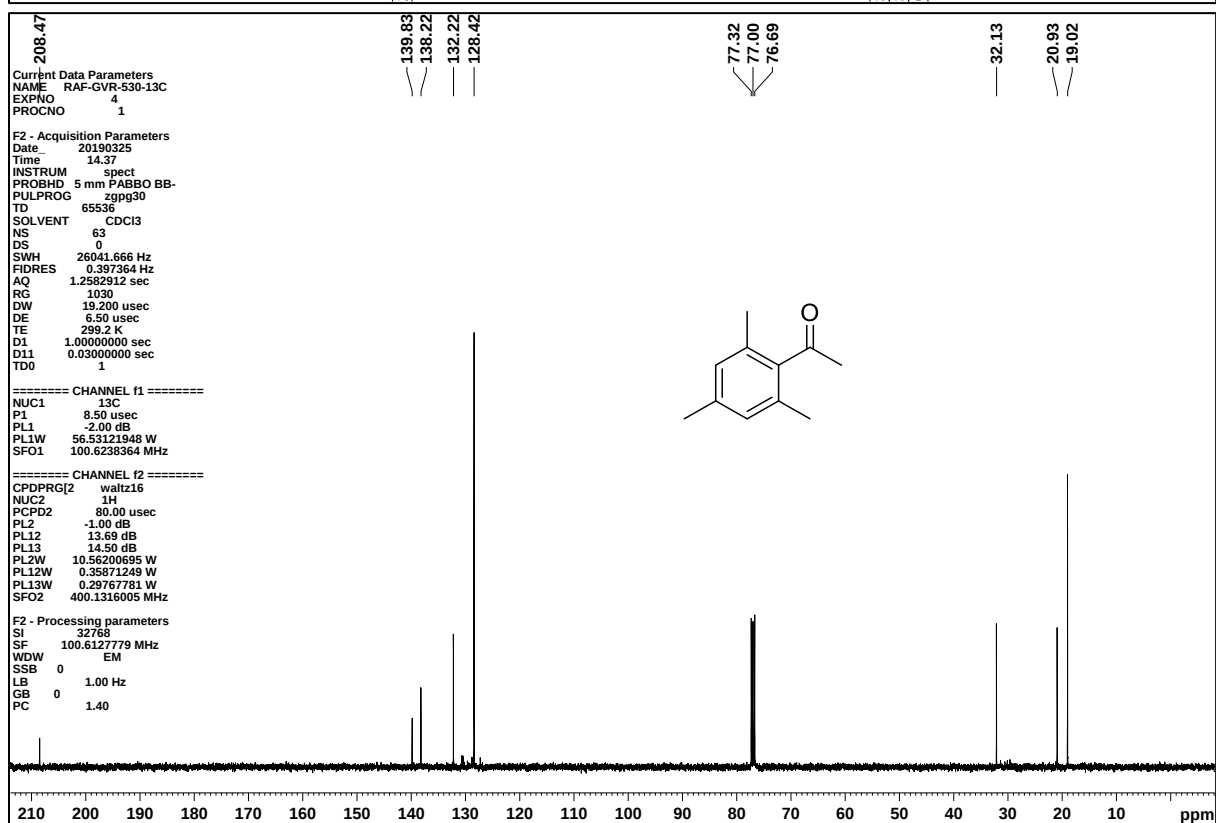
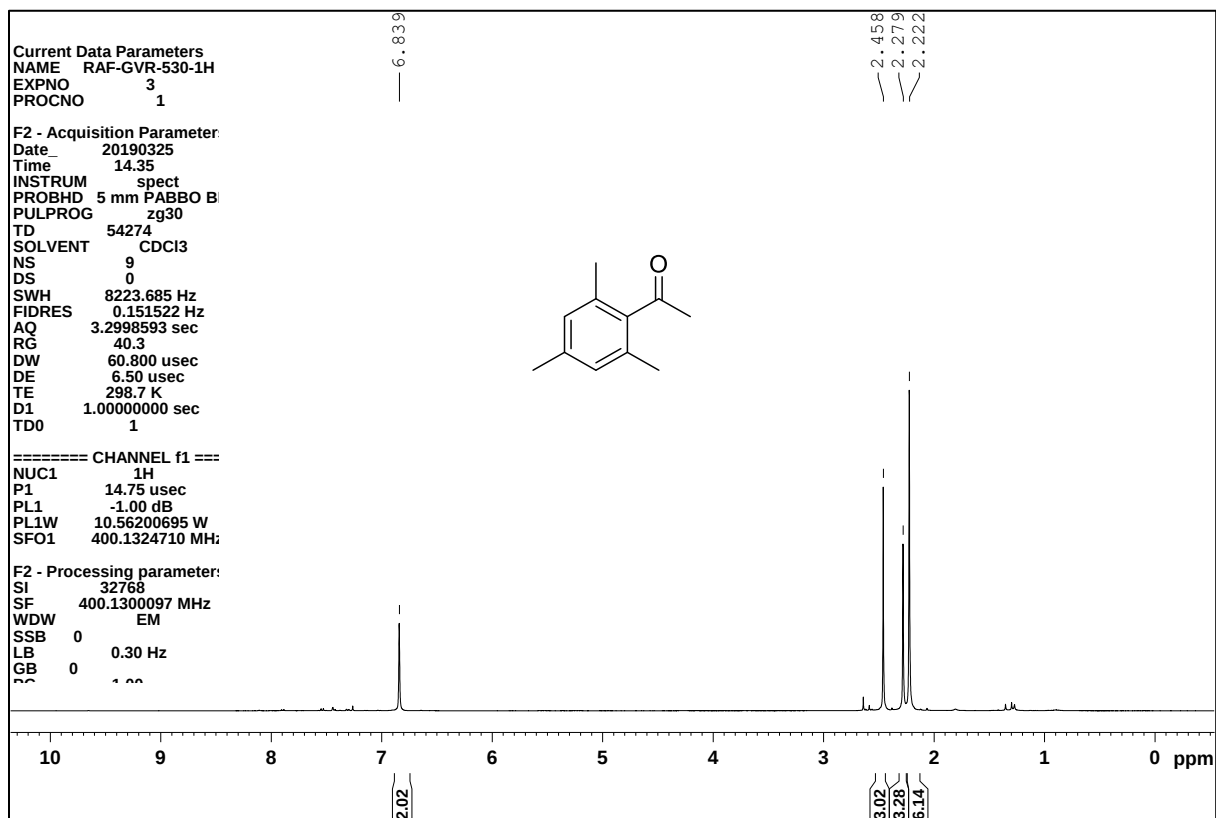
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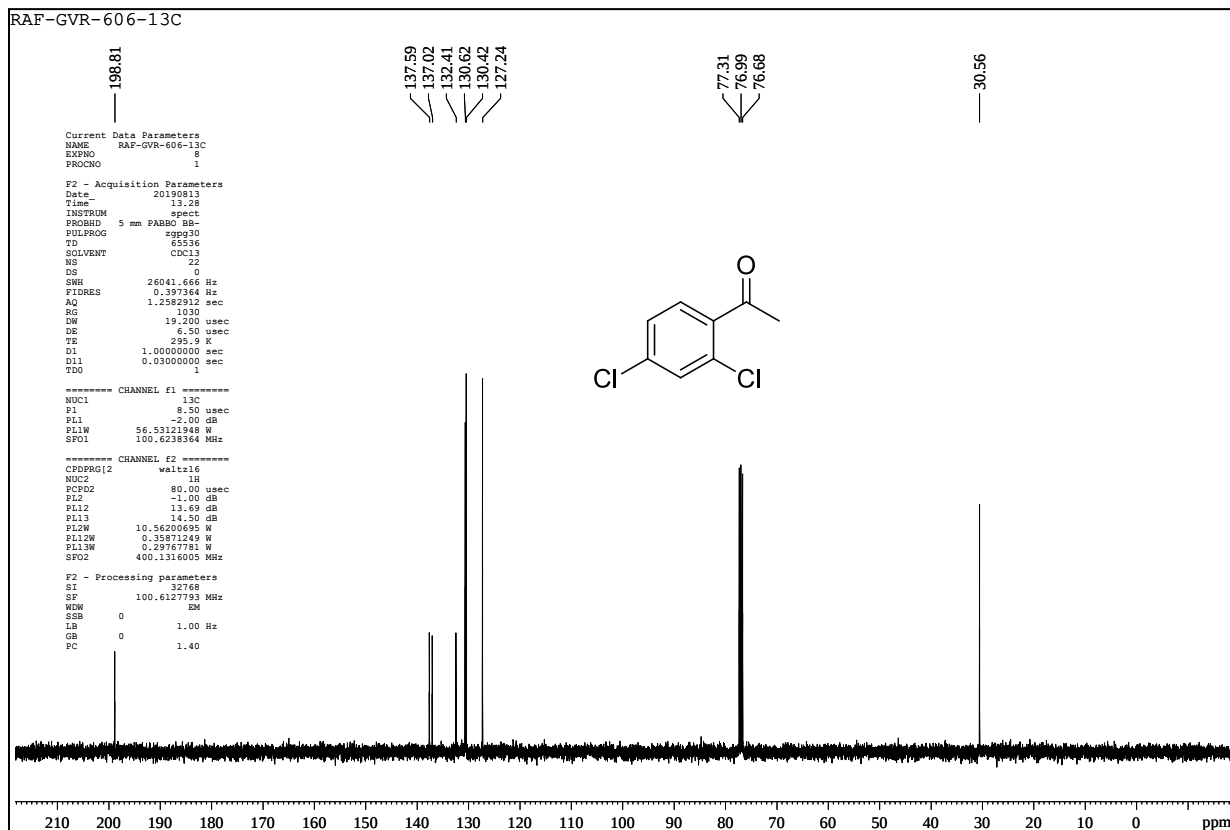
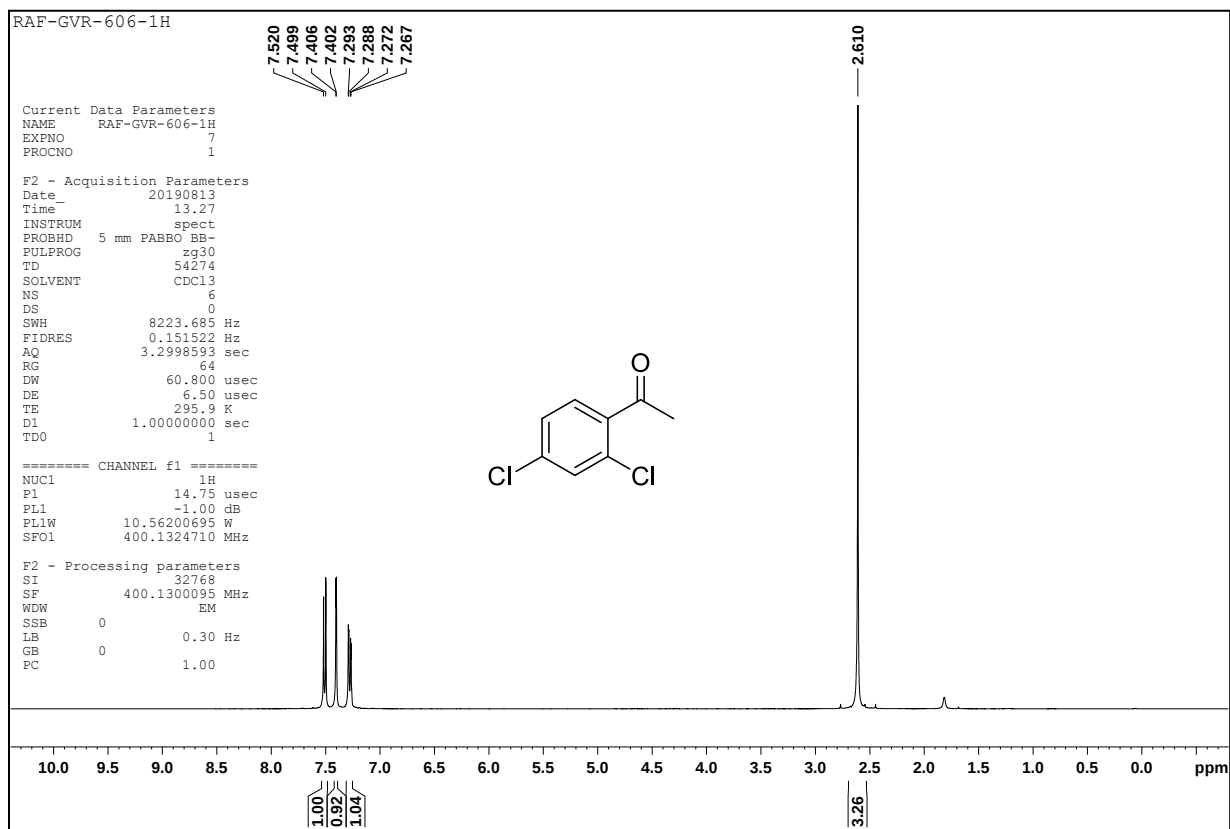
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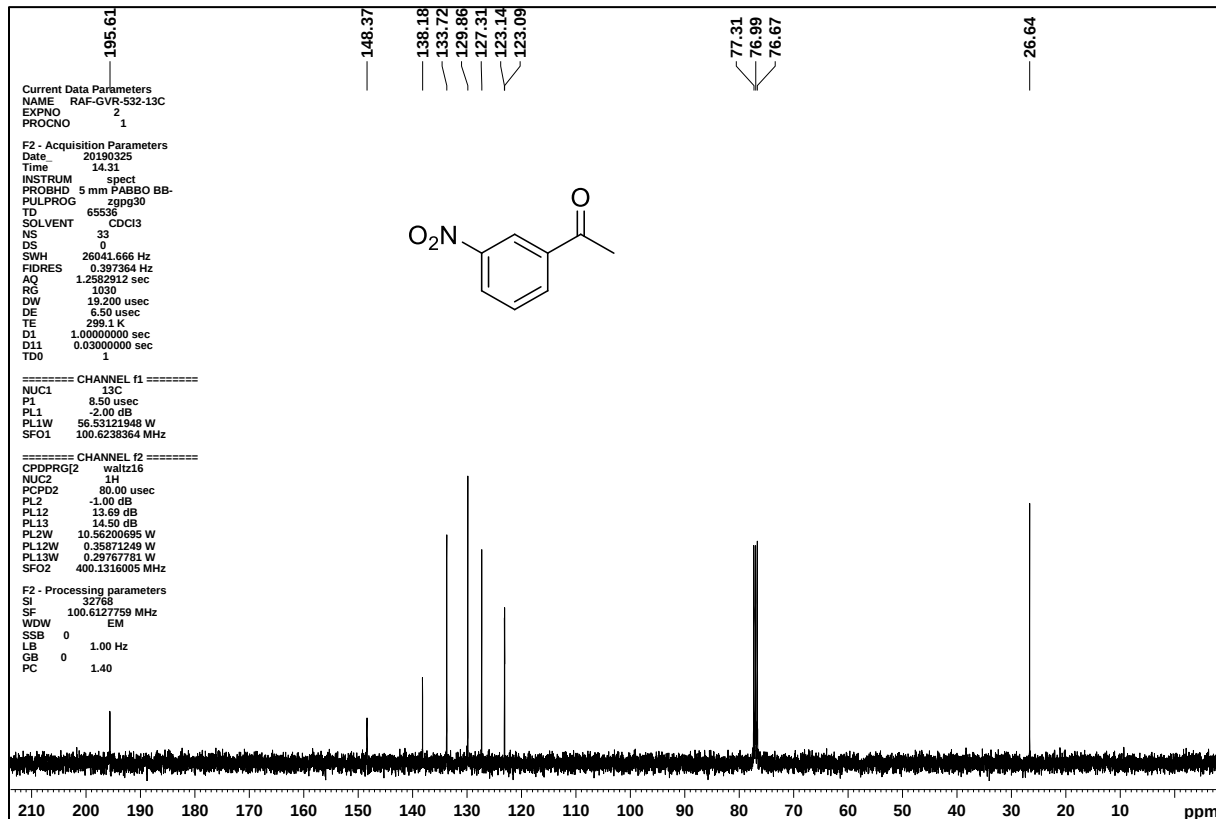
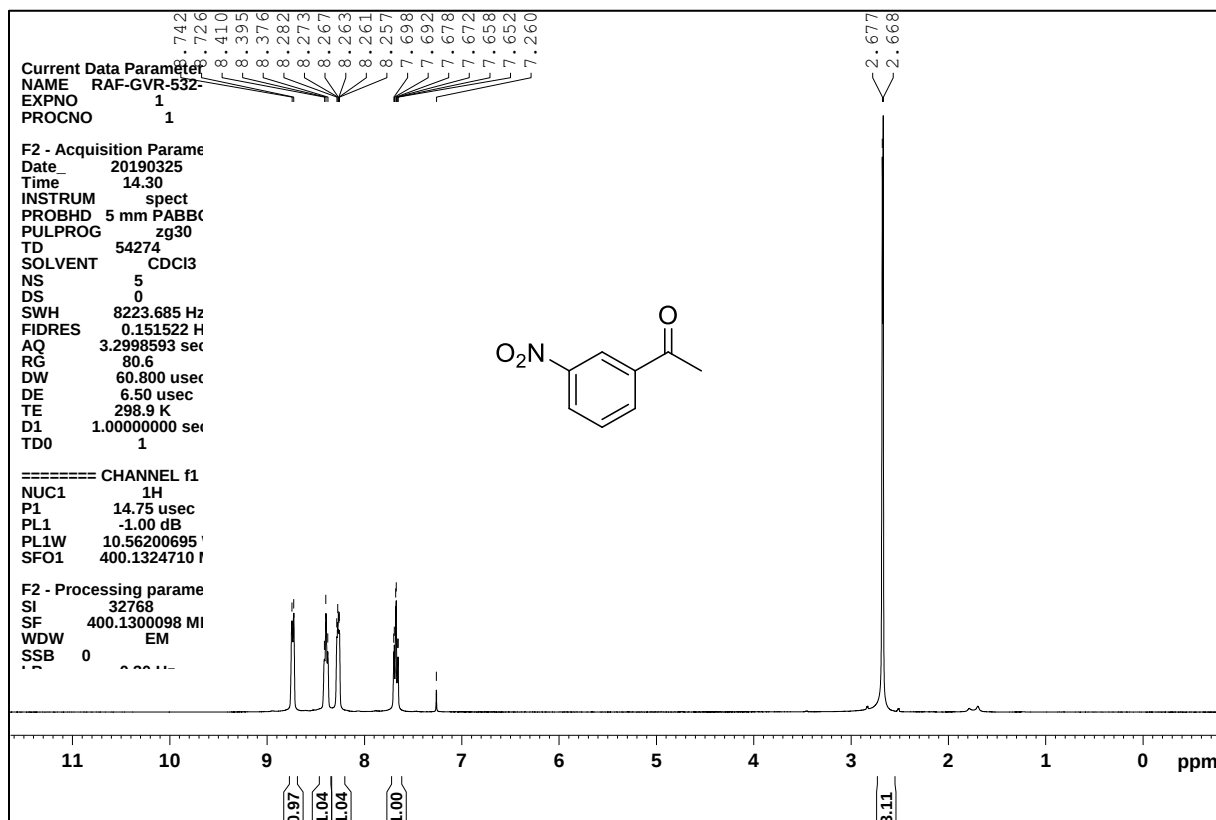
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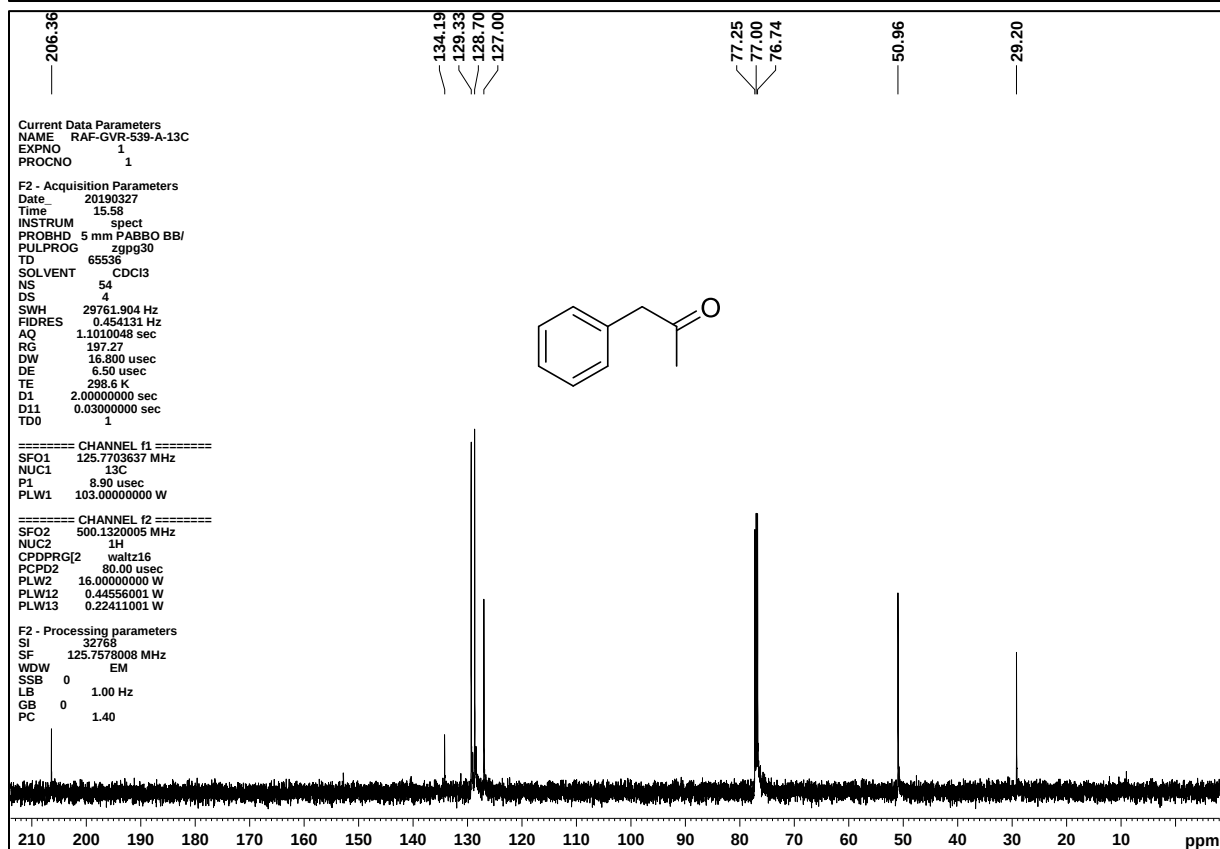
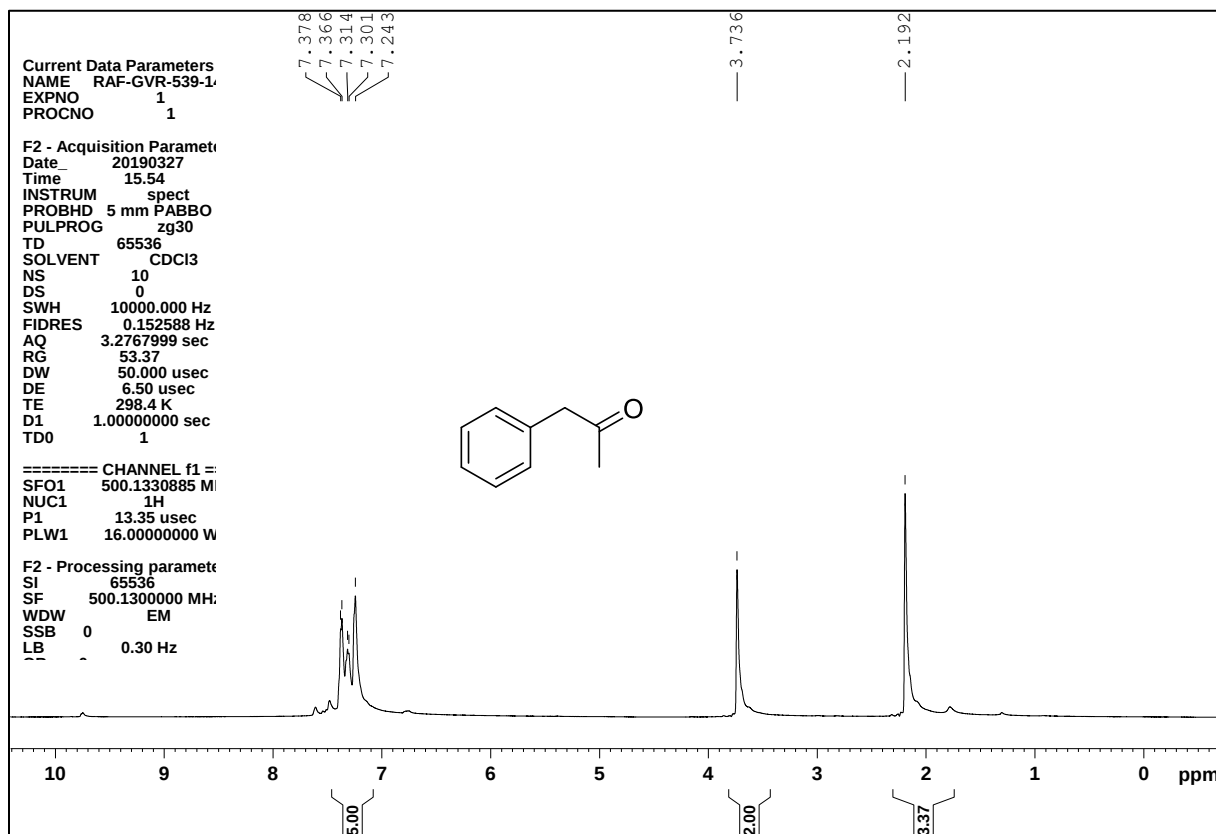
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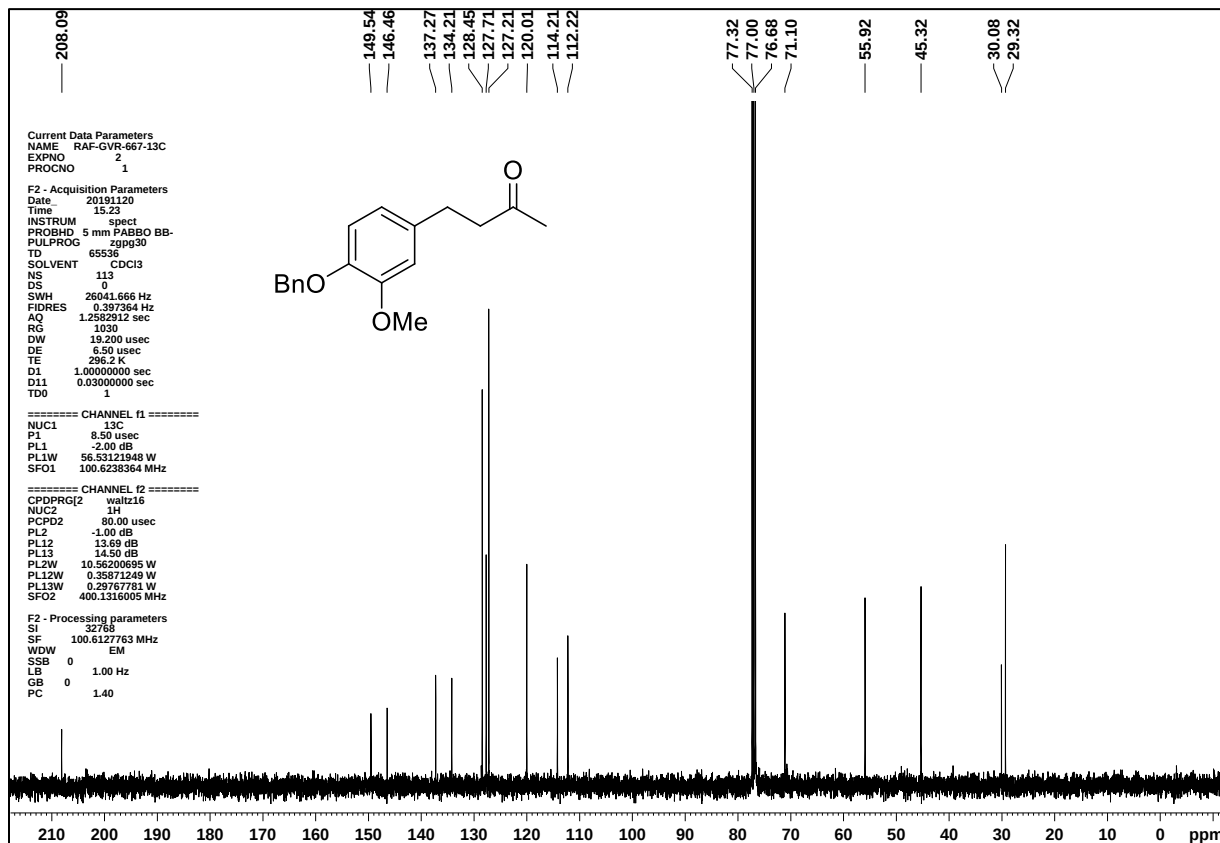
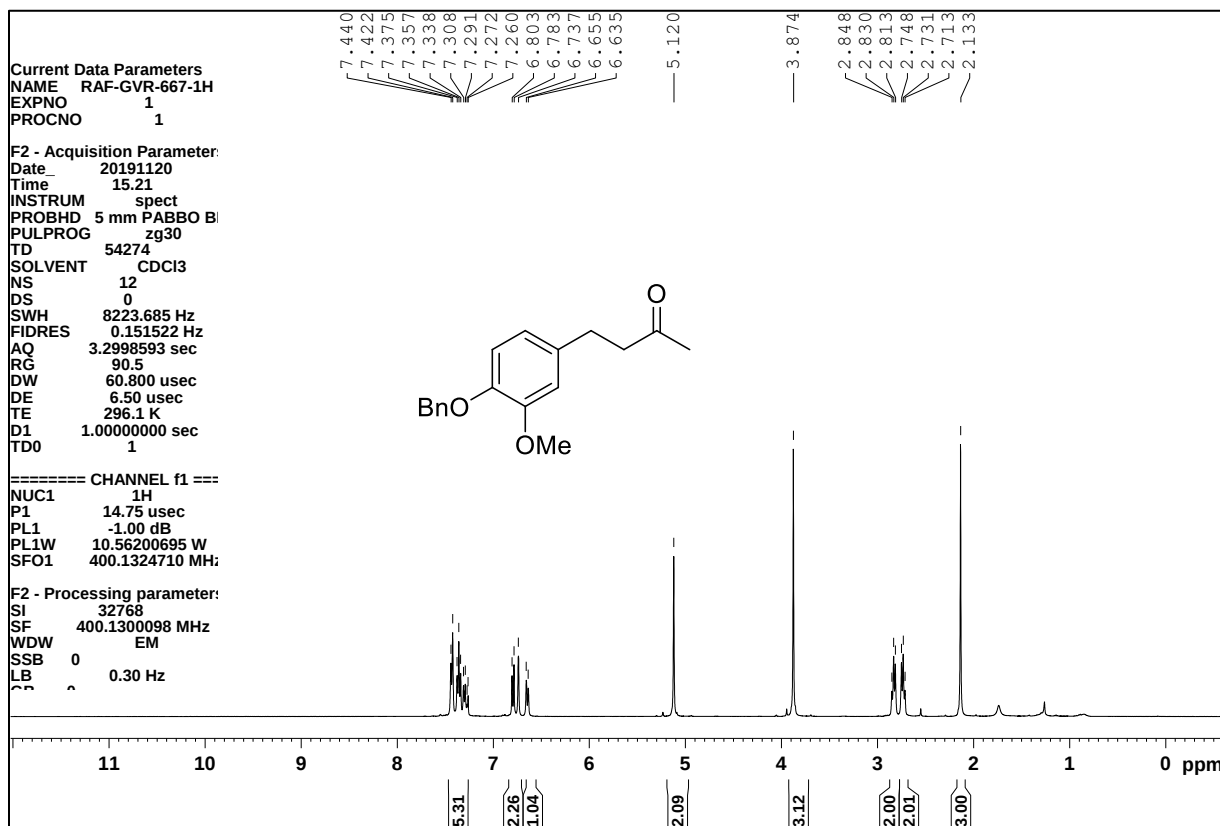
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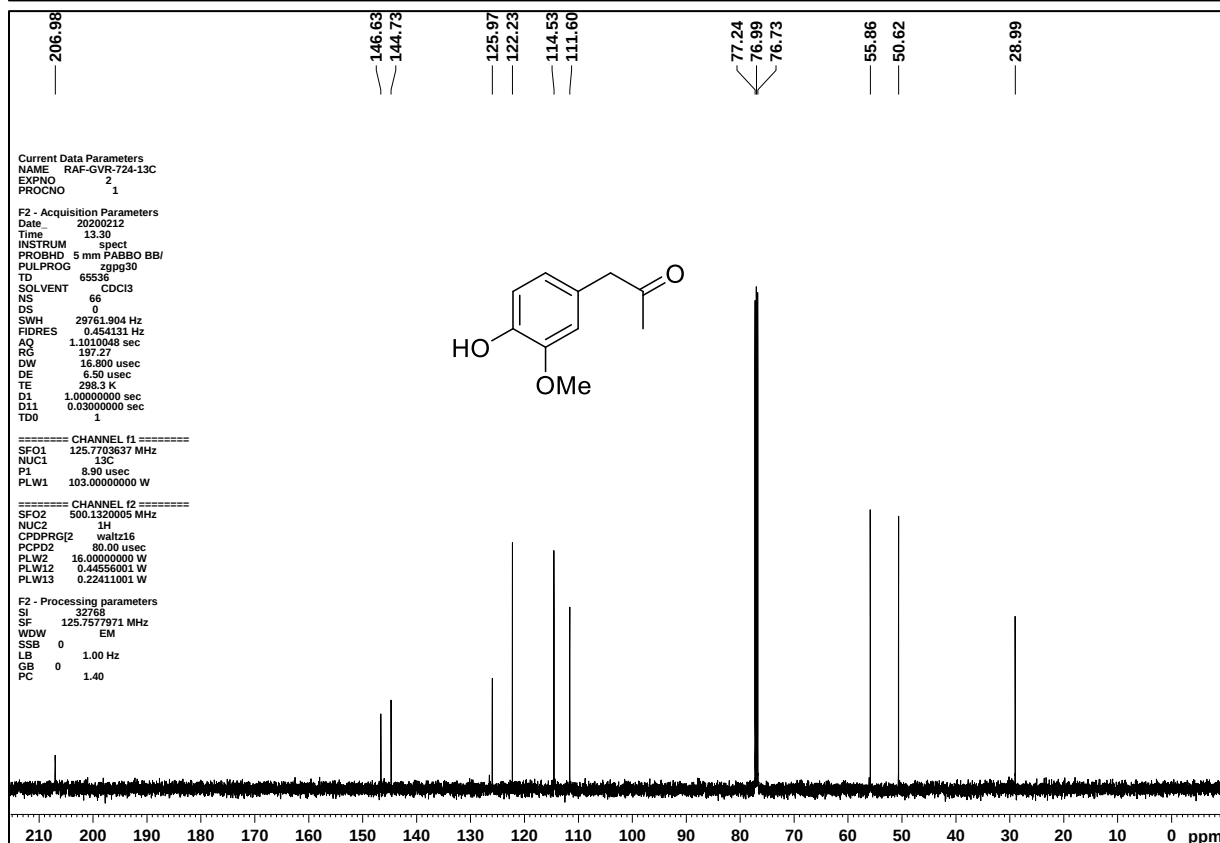
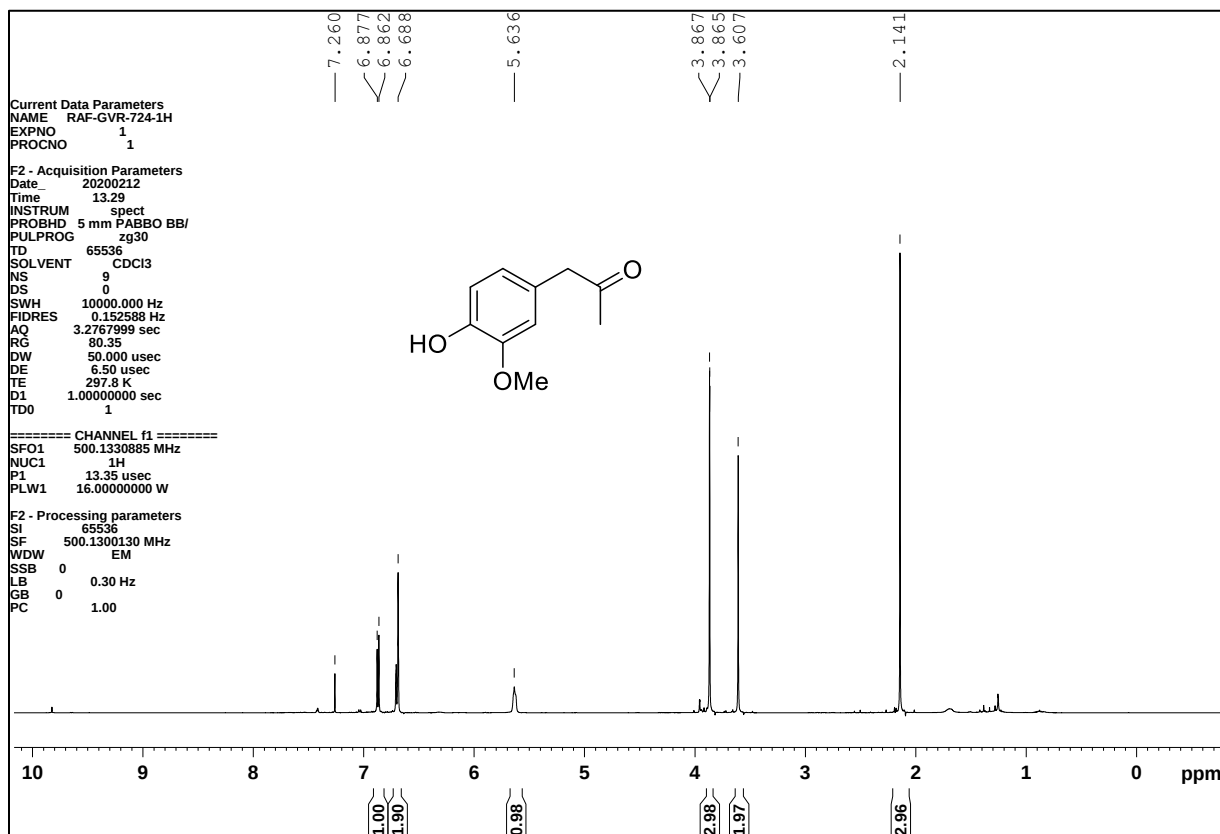
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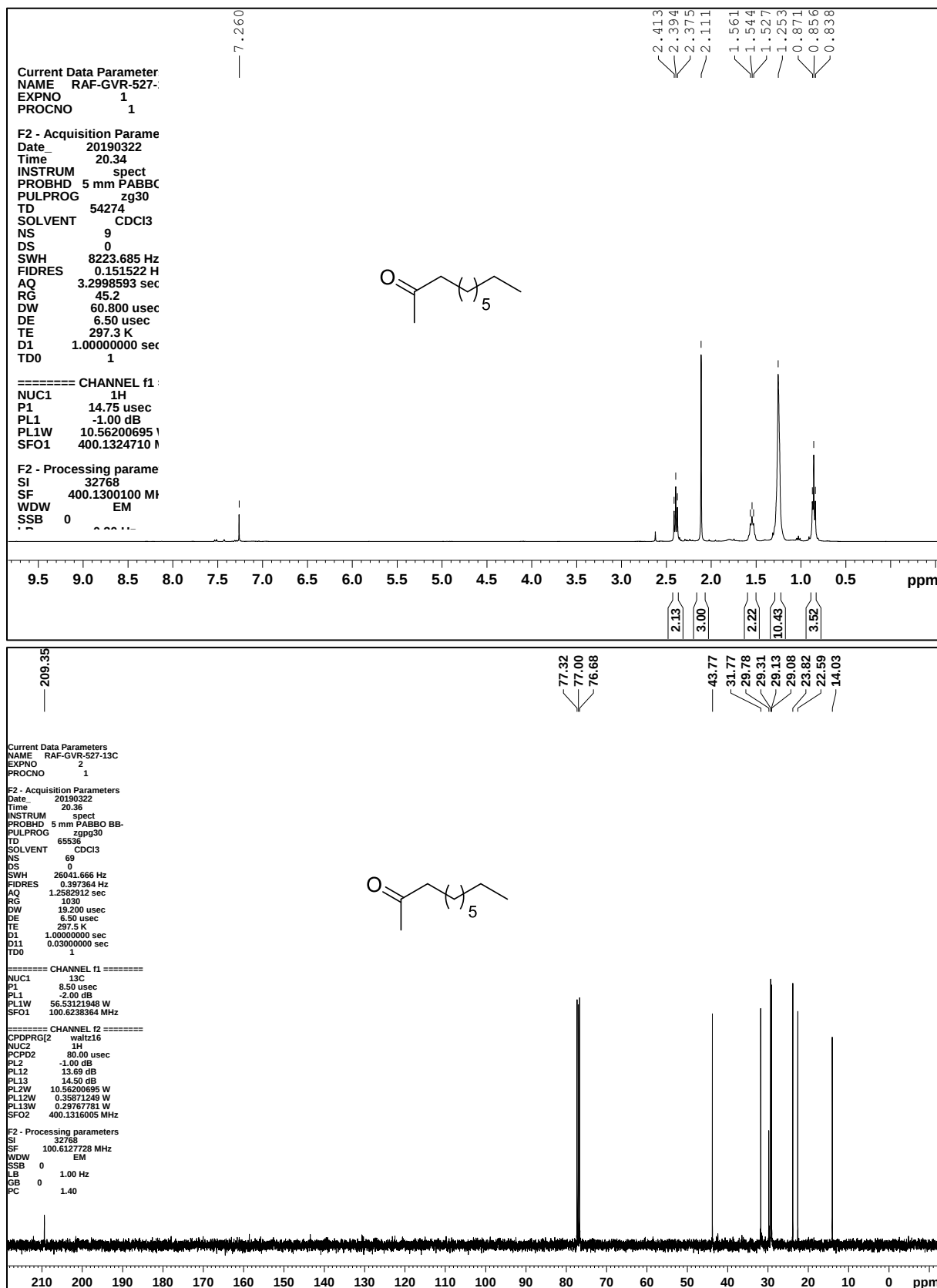
^1H NMR (400 MHz, CDCl_3) and $^{13}\text{C}\{^1\text{H}\}$ NMR (100 MHz, CDCl_3) of **3'o**



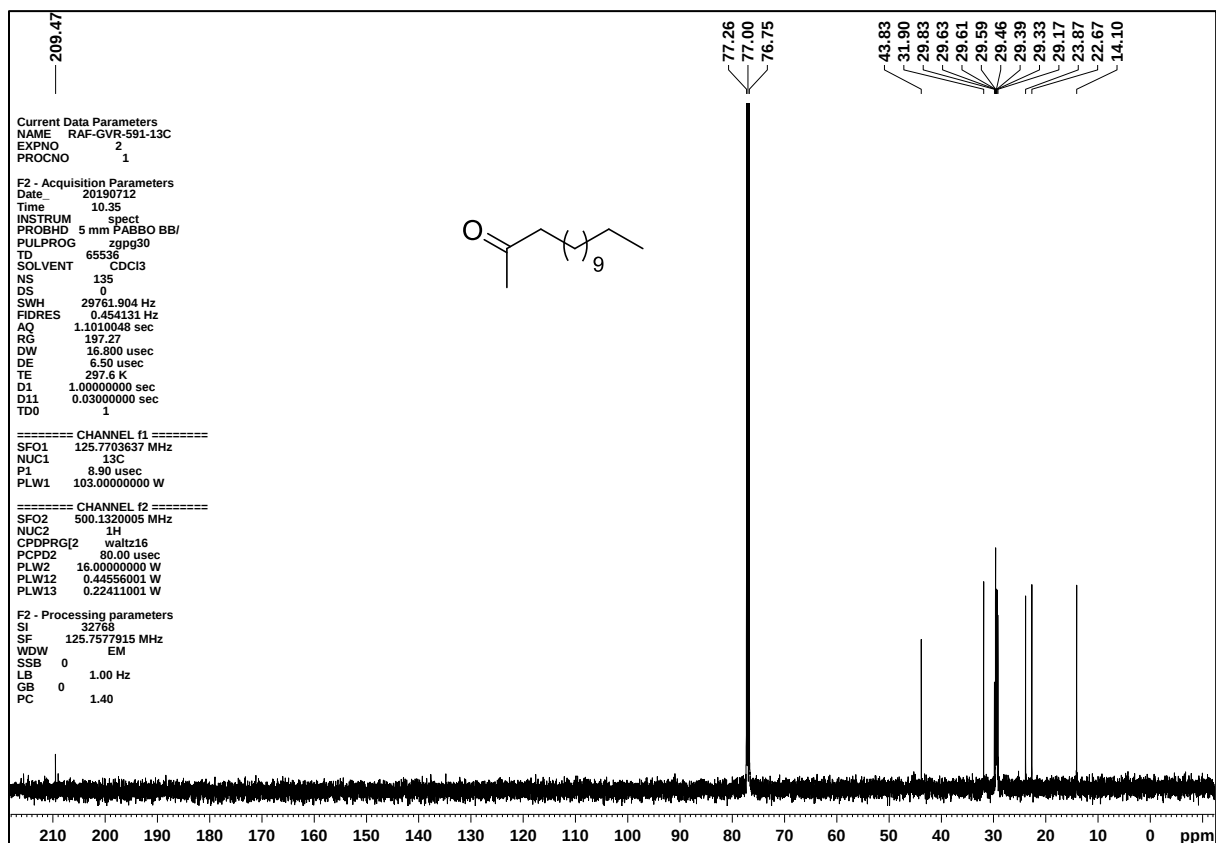
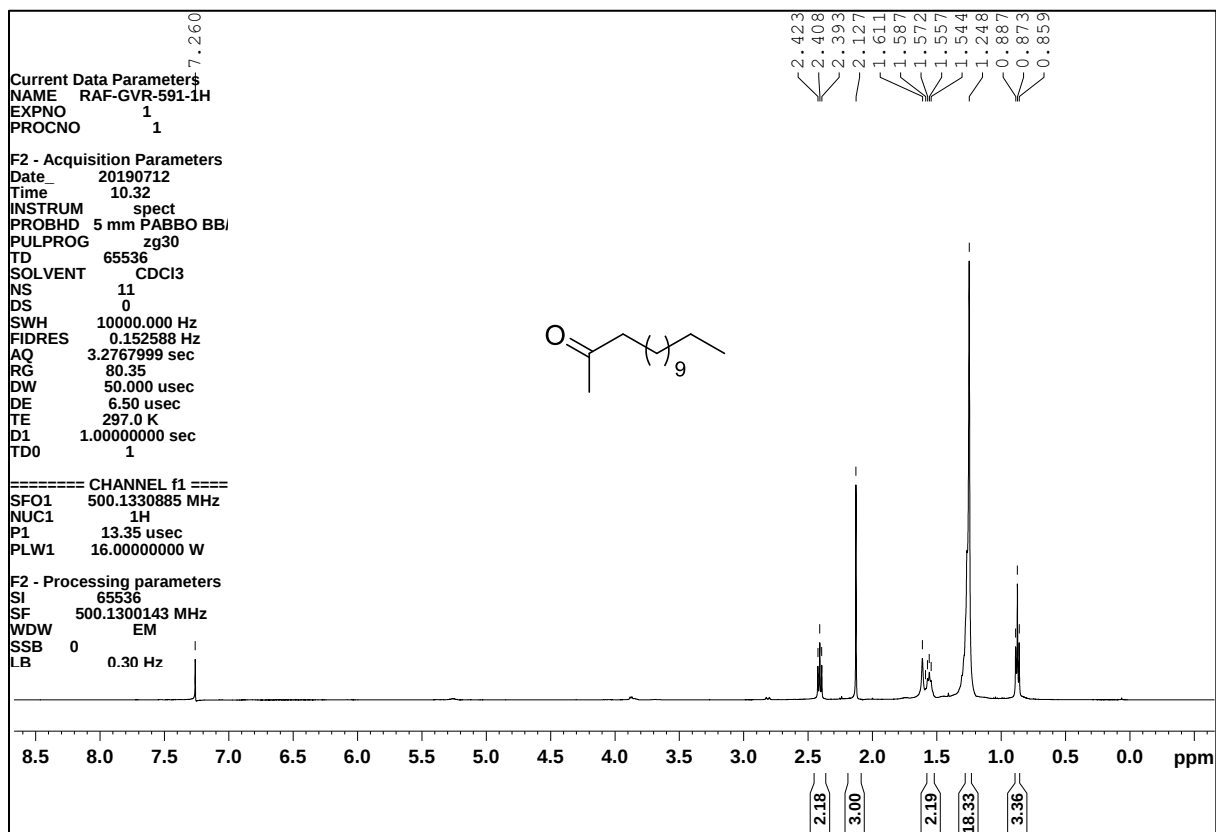
^1H NMR (500 MHz, CDCl_3) and $^{13}\text{C}\{^1\text{H}\}$ NMR (125 MHz, CDCl_3) of **3'p**



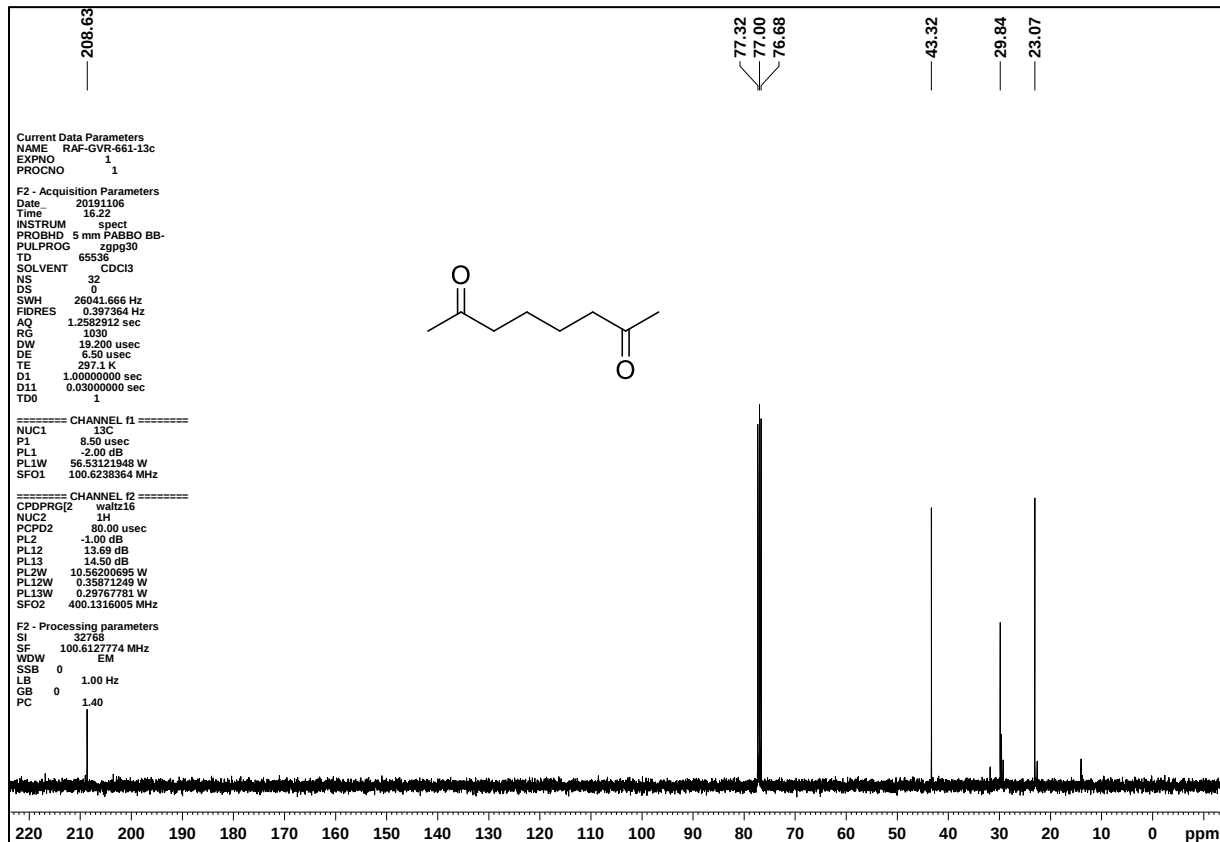
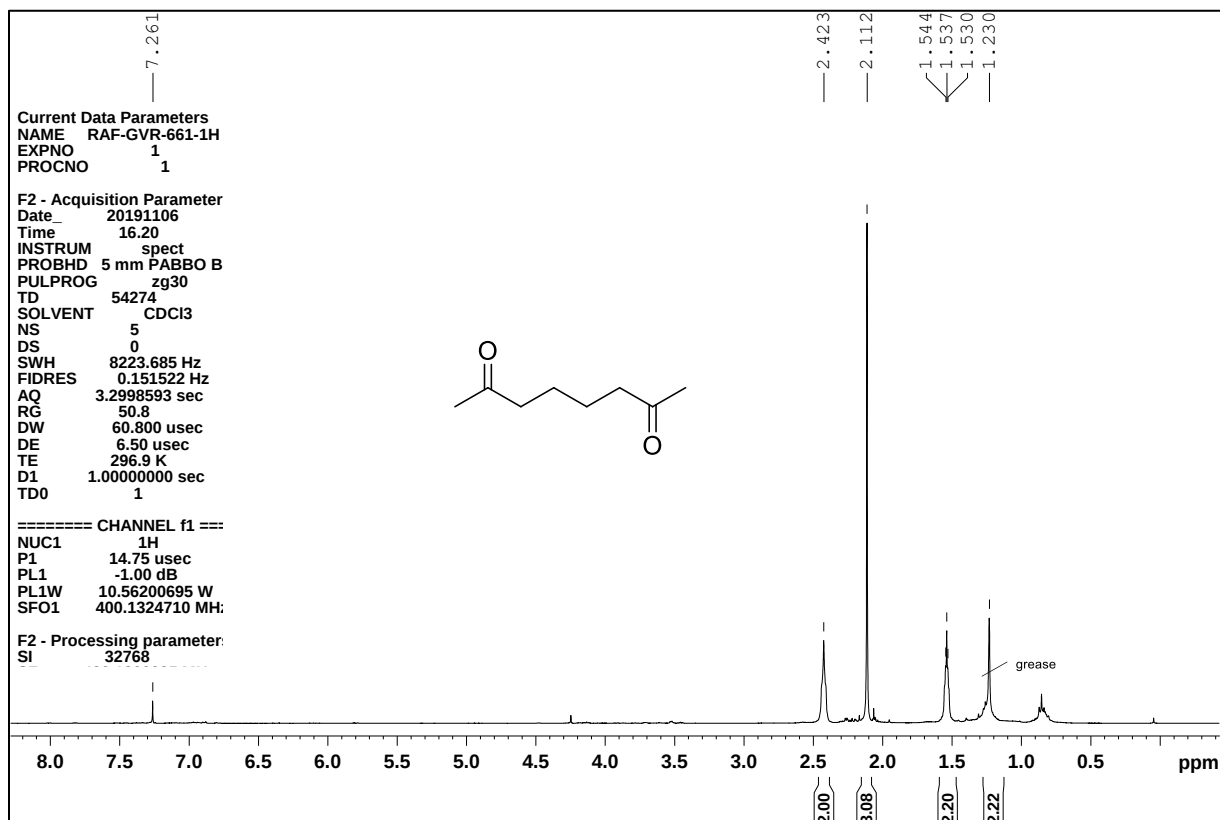
^1H NMR (400 MHz, CDCl_3) and $^{13}\text{C}\{^1\text{H}\}$ NMR (100 MHz, CDCl_3) of **3'q**



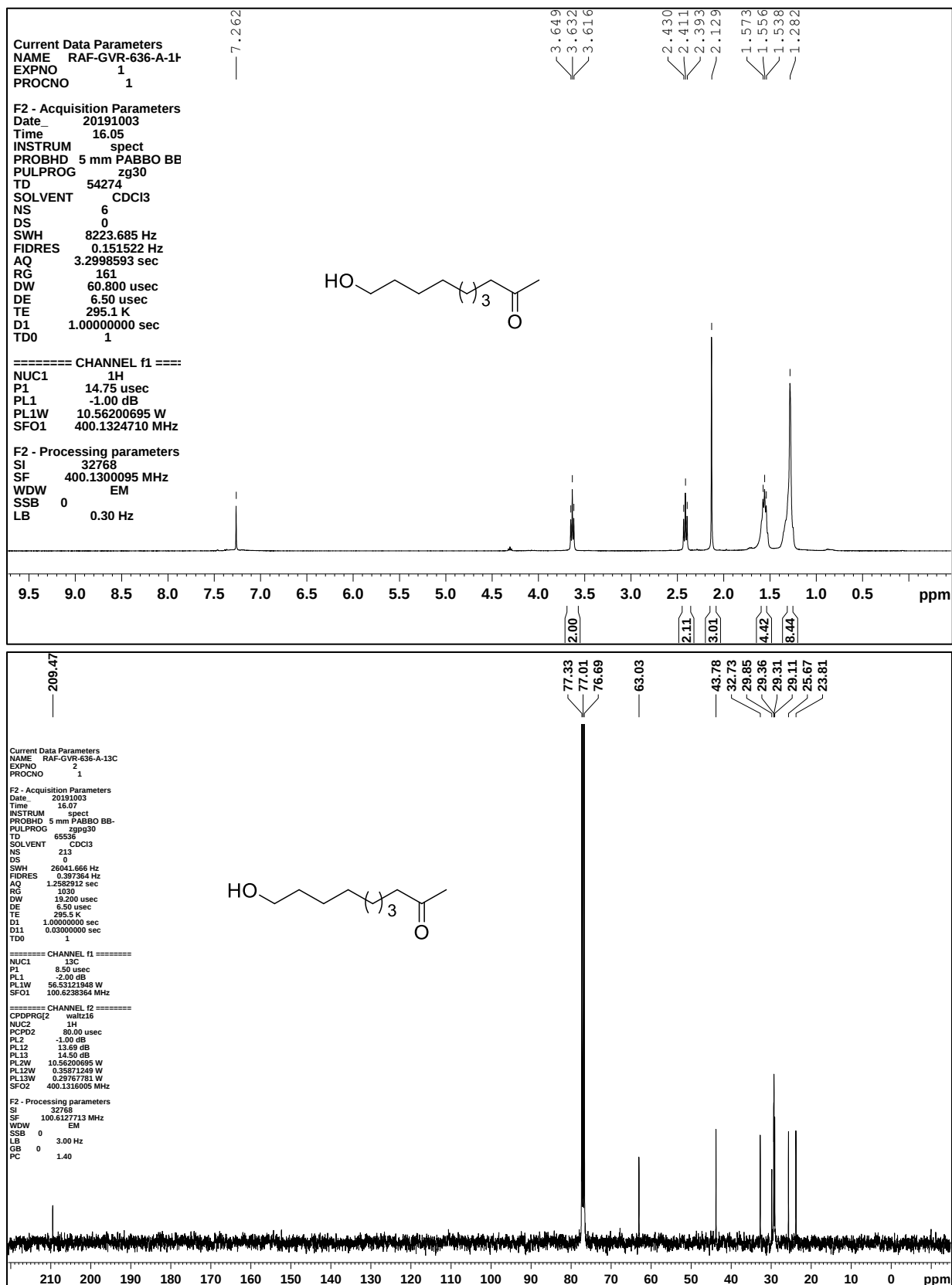
^1H NMR (500 MHz, CDCl_3) and $^{13}\text{C}\{^1\text{H}\}$ NMR (125 MHz, CDCl_3) of **3'r**



^1H NMR (400 MHz, CDCl_3) and $^{13}\text{C}\{^1\text{H}\}$ NMR (100 MHz, CDCl_3) of **3's**



^1H NMR (400 MHz, CDCl_3) and $^{13}\text{C}\{^1\text{H}\}$ NMR (100 MHz, CDCl_3) of **3't**



RAF-GVR-592-1H

Current Data Parameters
NAME RAF-GVR-592-1H
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20190712
Time 16.15
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 54274
SOLVENT CDCl3
NS 4
DS 0
SWH 8223.685 Hz
FIDRES 0.151522 Hz
AQ 3.2998593 sec
RG 57
DW 60.800 usec
DE 6.50 usec
TE -1377.8 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 14.75 usec
PL1 -1.00 dB
PL1W 10.56200695 W
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300104 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

7.259

3.621
3.604
3.588

2.410
2.392
2.373
2.109
1.857
1.550
1.533
1.515
1.261

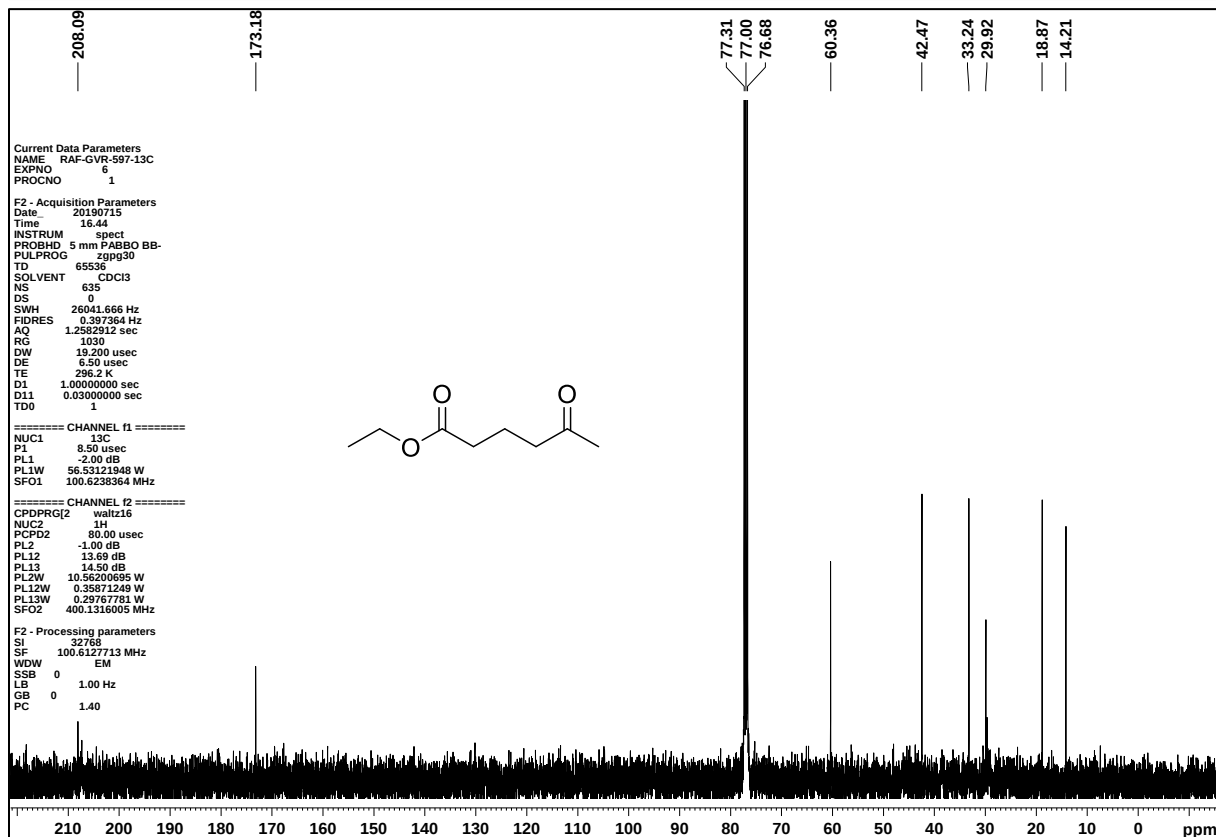
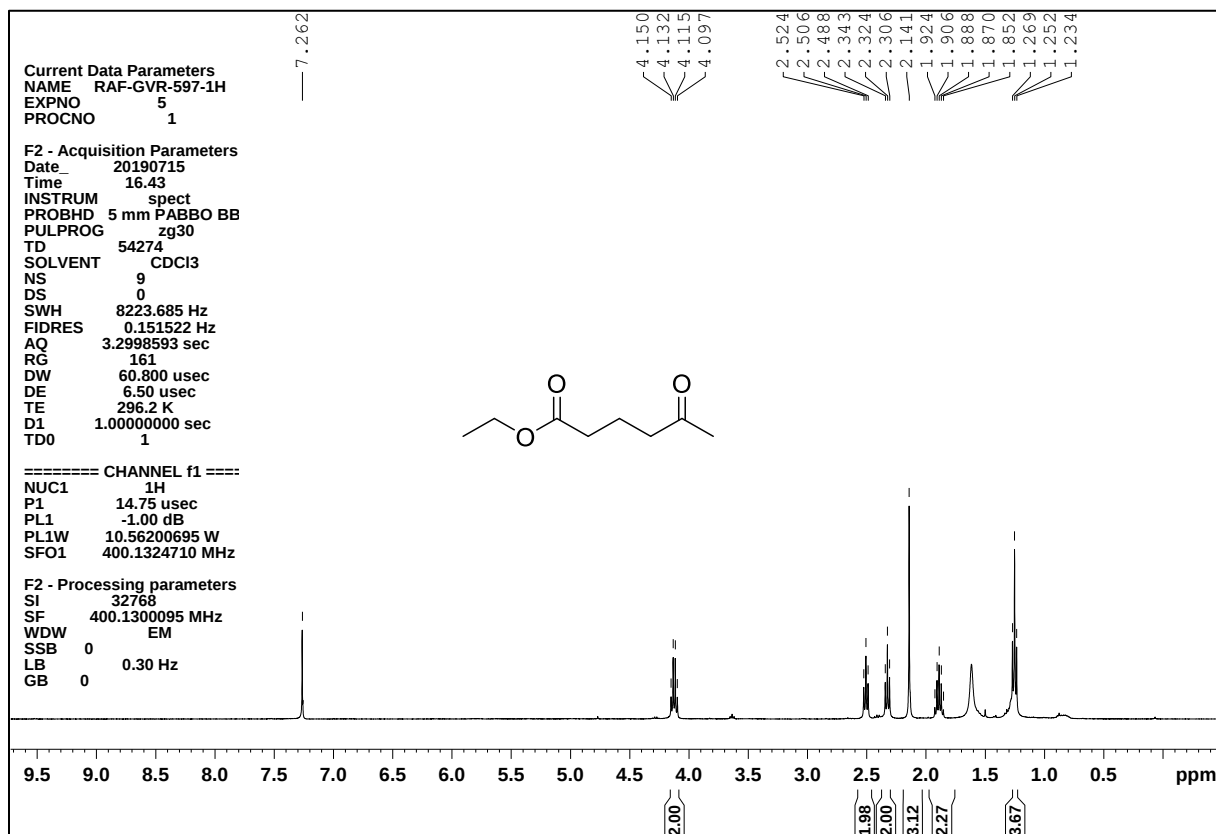
HO-CH₂-CH₂-CH₂-(CH₂)₄-C(=O)CH₃

10.0 9.5 9.0 8.5 8.0 7.5 7.0 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0 ppm

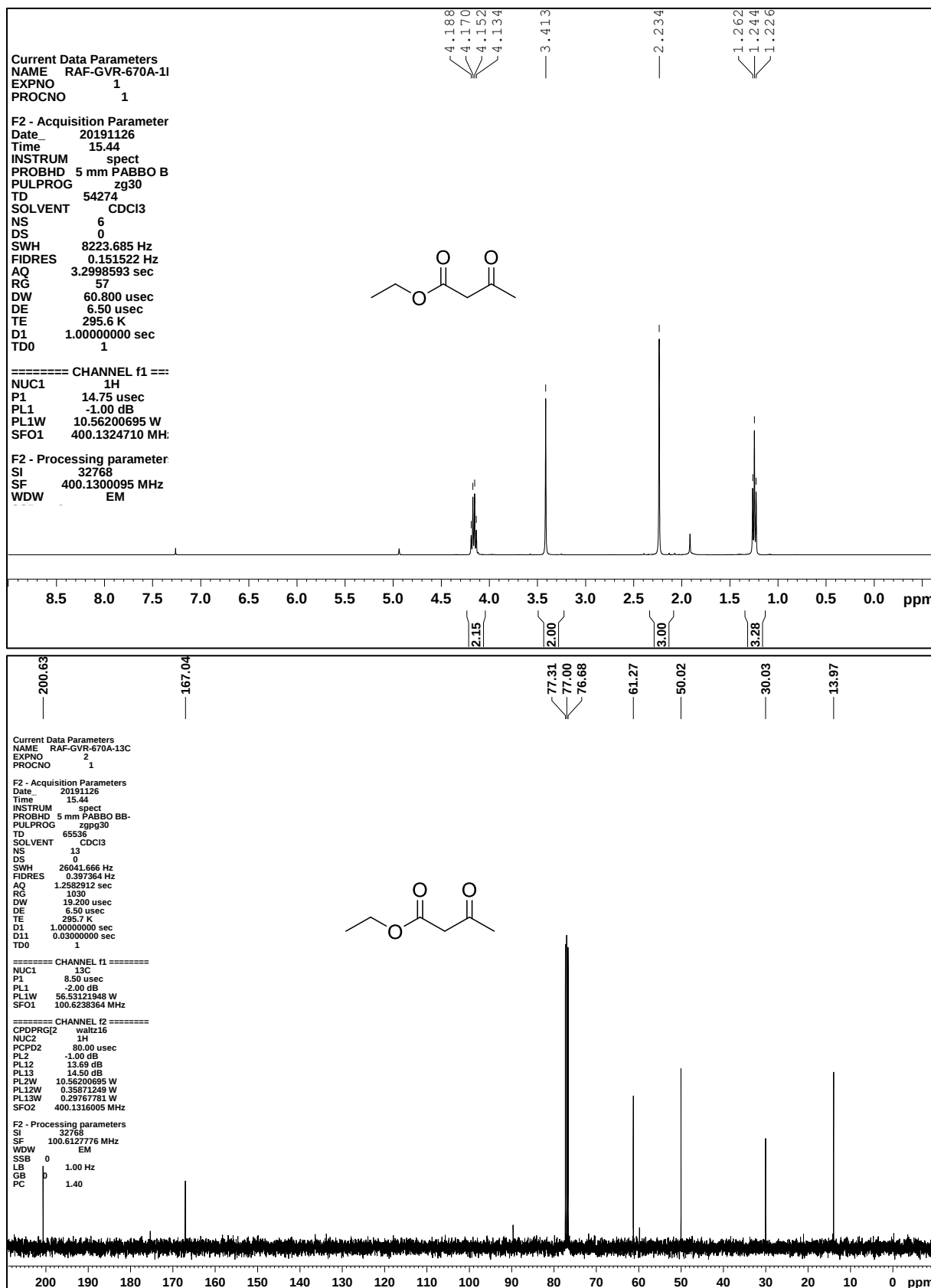
2.00
1.97
2.87
1.07
4.14
10.50



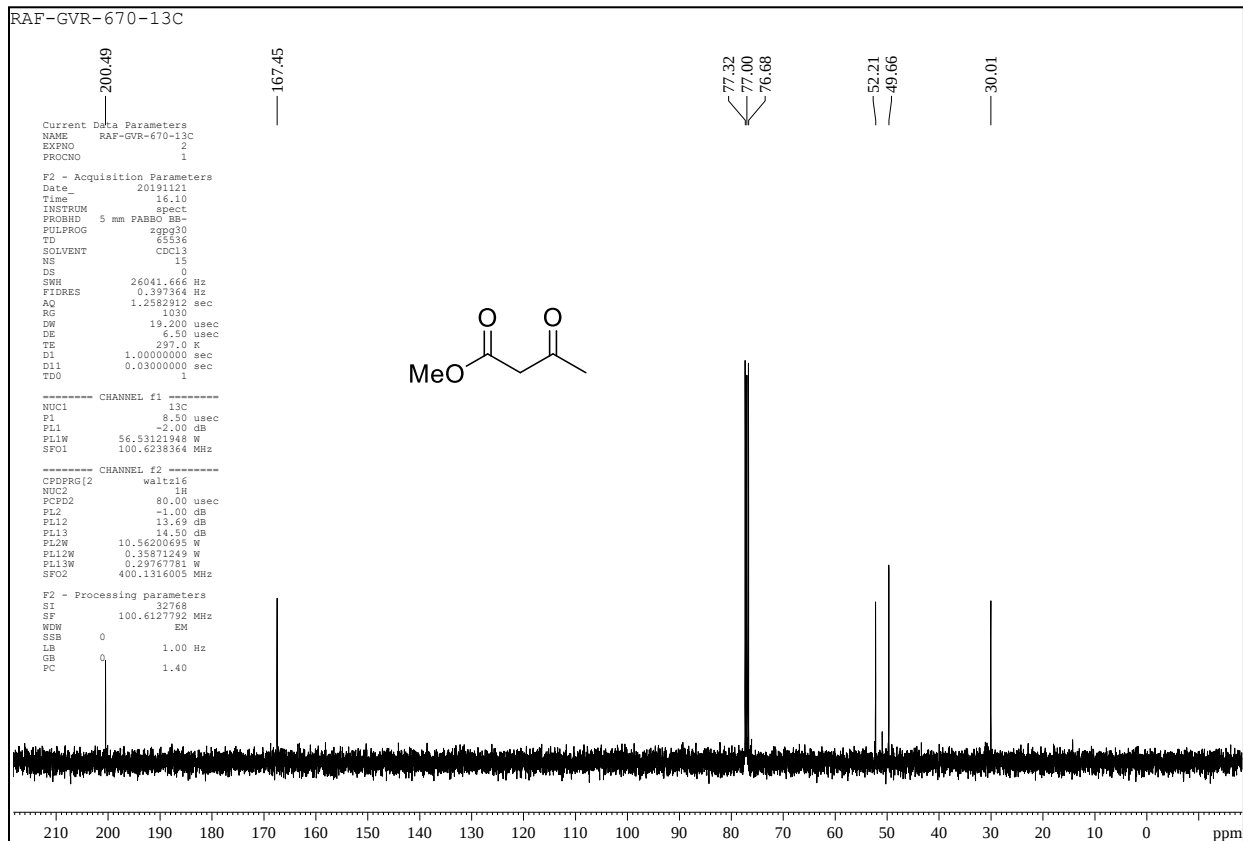
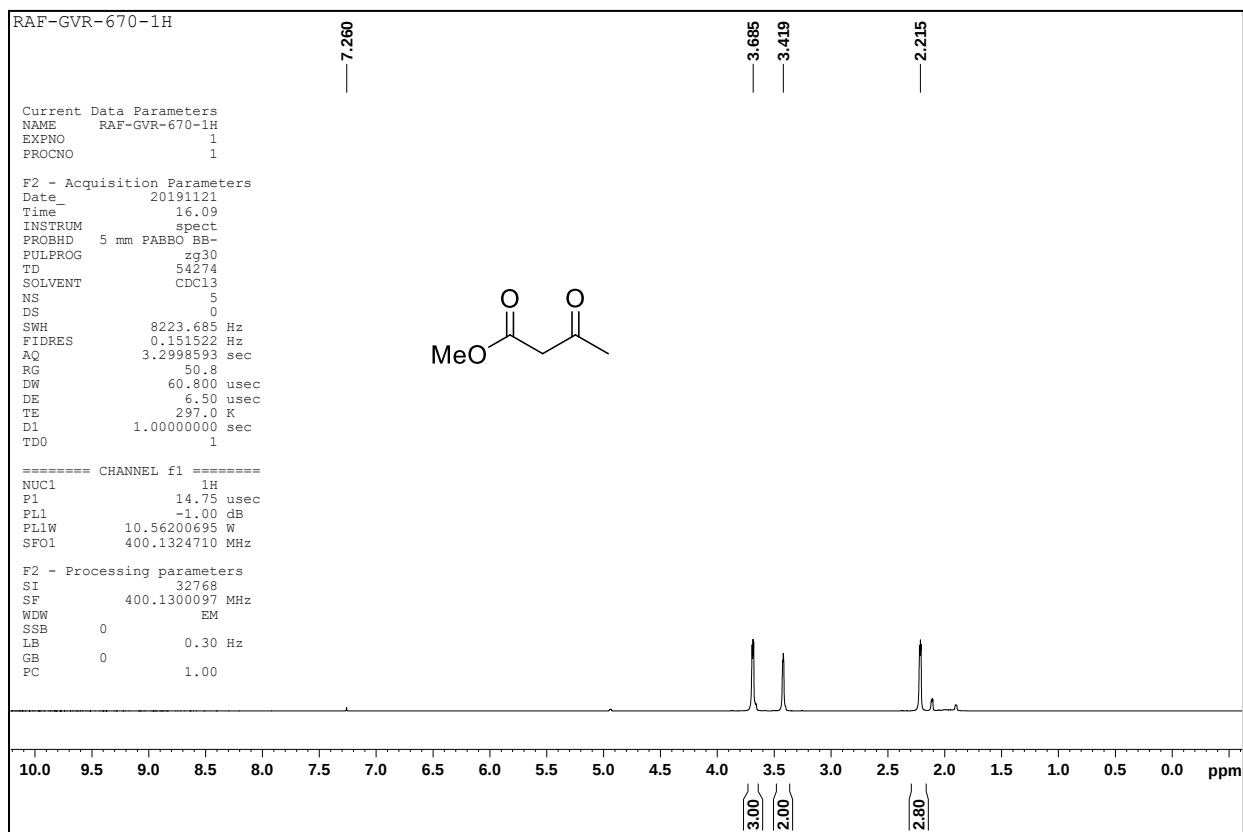
^1H NMR (400 MHz, CDCl_3) and $^{13}\text{C}\{^1\text{H}\}$ NMR (100 MHz, CDCl_3) of **3'v**



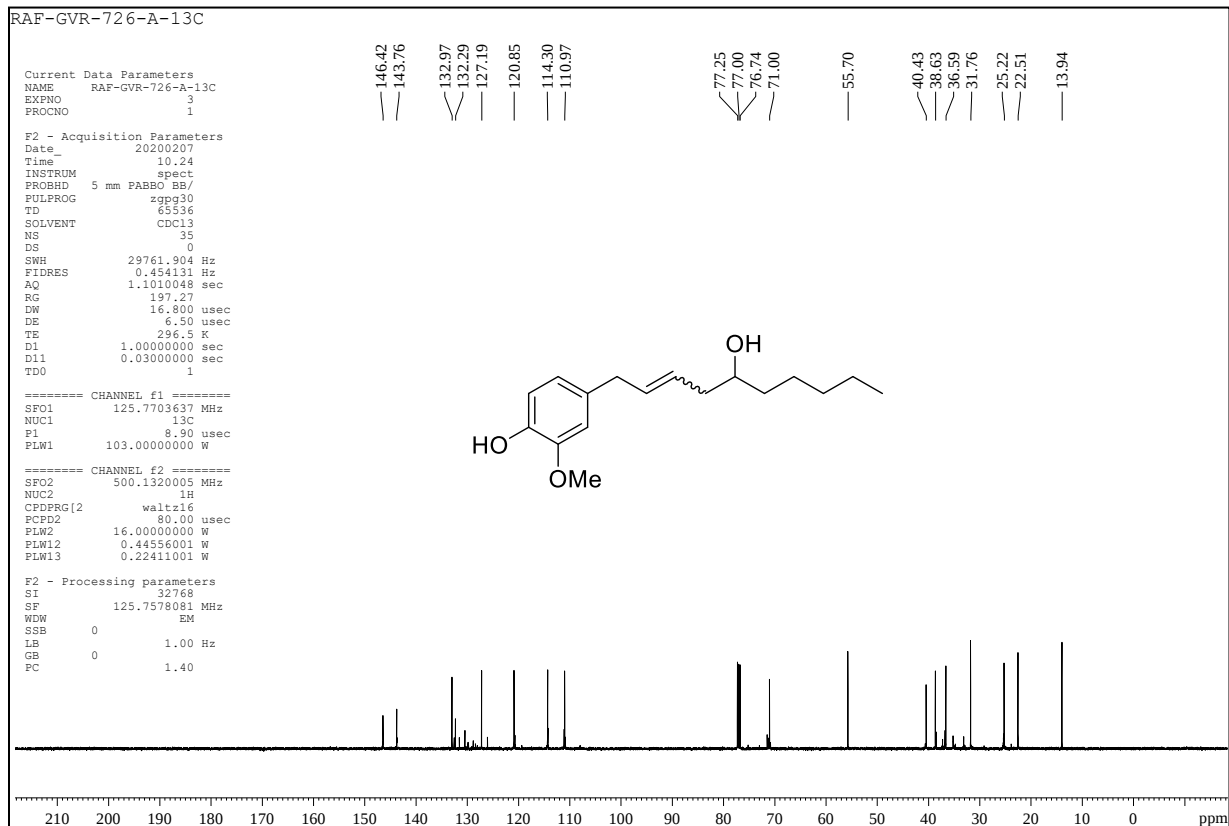
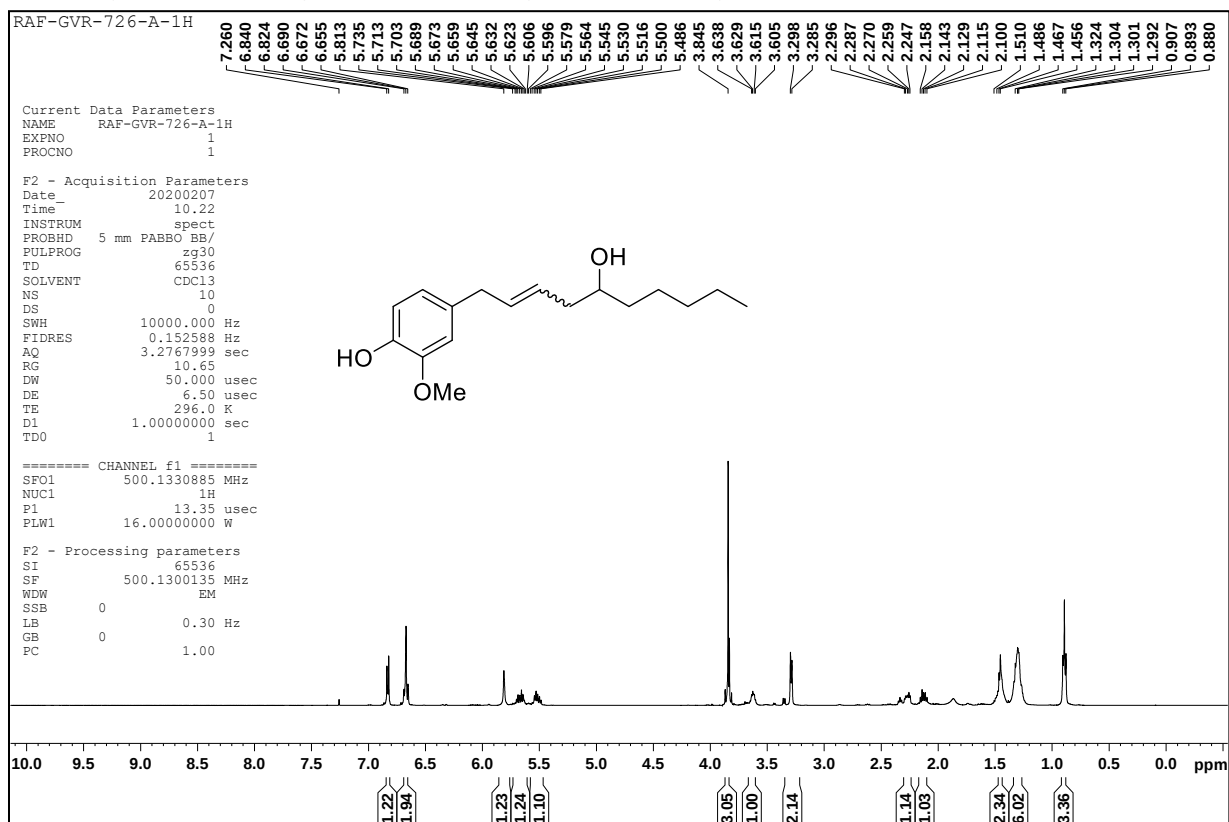
^1H NMR (400 MHz, CDCl_3) and $^{13}\text{C}\{^1\text{H}\}$ NMR (100 MHz, CDCl_3) of **3'w**



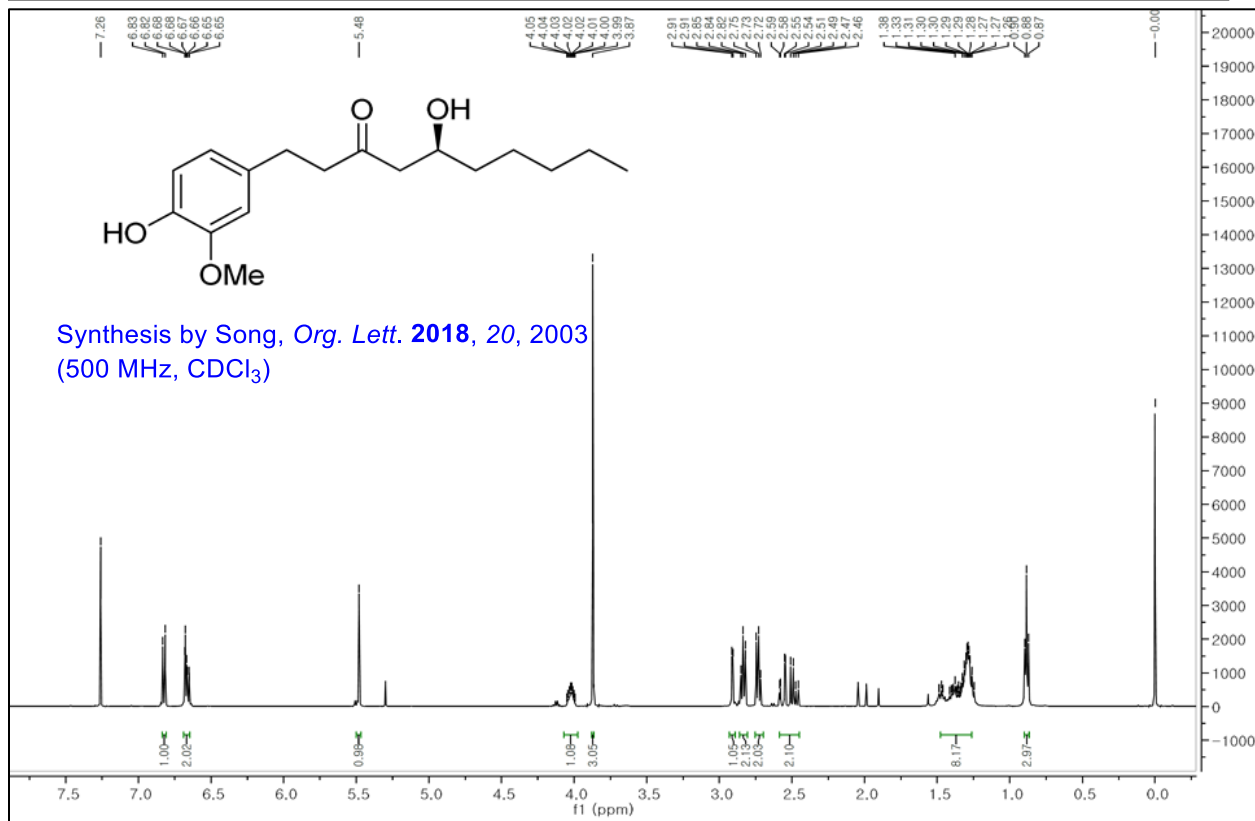
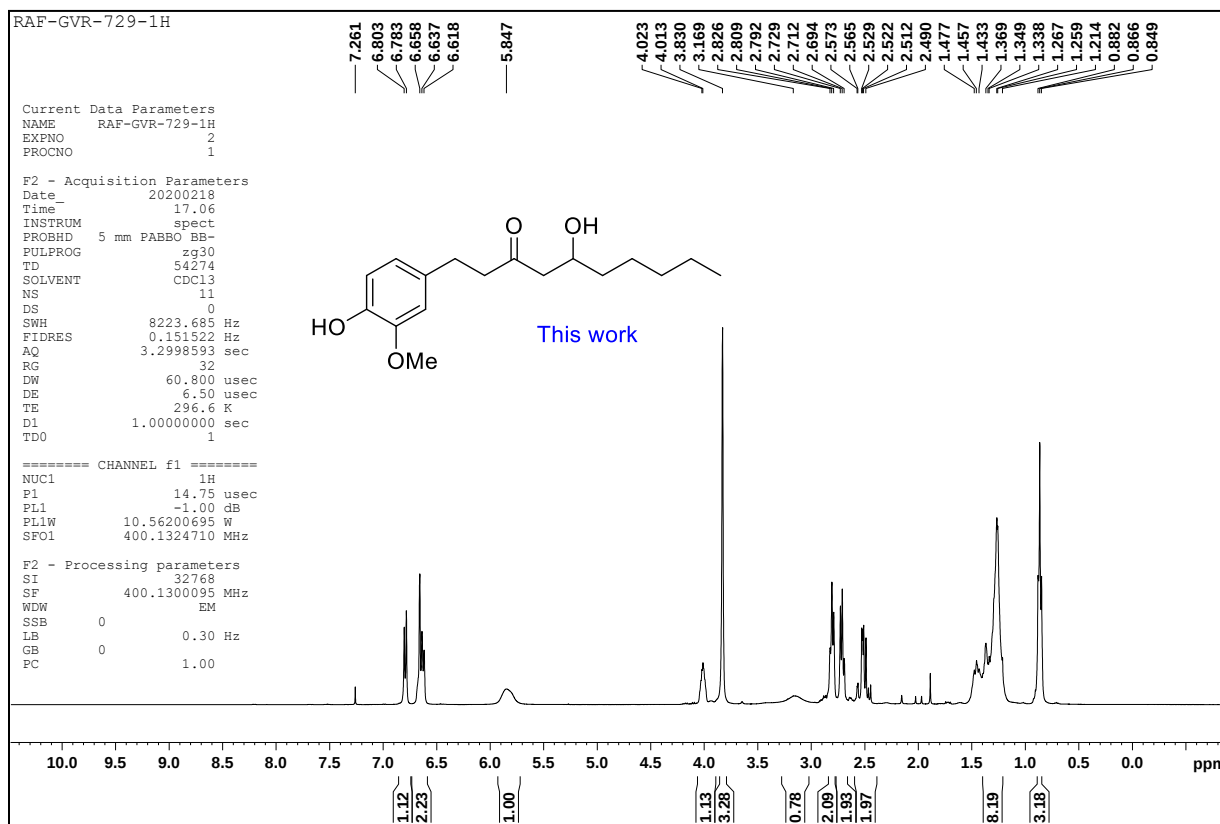
^1H NMR (400 MHz, CDCl_3) and $^{13}\text{C}\{^1\text{H}\}$ NMR (100 MHz, CDCl_3) of **3'**x



¹H NMR (500 MHz, CDCl₃) and ¹³C{¹H} NMR (125 MHz, CDCl₃) of **7**



¹H NMR (400 MHz, CDCl₃) of (±)-gingerol (**8**)



$^{13}\text{C}\{^1\text{H}\}$ NMR (100 MHz, CDCl_3) of ($\pm$)-gingerol (**8**)

